Lovers Lane Safety Improvement Project

SANTA CLARA COUNTY, CALIFORNIA
DISTRICT 4 – SCL – 152 (PM 16.2/19.5)
2A4400

Initial Study with Mitigated Negative Declaration

Prepared by the
State of California Department of Transportation

March 2010

General Information About This Document

For individuals with sensory disabilities, this document can be made available in Braille, large print, on audiocassette, or on computer disk. To obtain a copy in one of these alternate formats, please call or write to Department of Transportation, Attn: Jared Goldfine, Senior Environmental Planner, Office of Environmental Planning, MS 6, P.O. Box 23660, Oakland, CA 94623-0660; (510) 286-6203 Voice, or use the California Relay Service 1 (800) 735-2929 (TTY).

THIS PAGE INTENTIONALLY LEFT BLANK

04-SCL-152-PM 16.2/19.5
SCH# 2009012085
2A4400

Improve sight distance, upgrade shoulders, and provide a left turn channelization lane at Lovers Lane on State Route 152, near Gilroy from Old Lake Road to San Felipe Road, (postmile 16.2 to postmile 19.5)

INITIAL STUDY/ Mitigated Negative Declaration

Submitted Pursuant to: (State) Division 13, California Public Resources Code

THE STATE OF CALIFORNIA
Department of Transportation

3/16/10
Date of Approval

James B. Richards
Deputy Director
Environmental Planning and Engineering
District 4 (Oakland)
California Department of Transportation

THIS PAGE INTENTIONALLY LEFT BLANK

Proposed Mitigated Negative Declaration

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Department) proposes to implement safety improvements along route 152 near Gilroy in Santa Clara County between Old Lake Road and San Felipe Lane. This project would improve sight distance, upgrade portions of the shoulders to current standards, and provide a left turn lane at the intersection of route 152 and Lovers Lane.

Determination

The Department has prepared an Initial Study for this project, and following public review, has determined from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on land use, growth, community character and cohesion, relocations, utilities and emergency services, traffic and transportation/pedestrian and bicycle facilities, paleontology, hazardous waste/materials, air quality, noise, natural communities, or cumulative effects.

In addition, the proposed project would have no significant effect on farmlands, cultural resources, hydrology and floodplains, geology/soils/seismic/topography, water quality and storm water runoff wetlands and other waters, or plant species.

The proposed project would have no significant adverse effect on visual/aesthetics, water quality and storm water runoff, animal species, or threatened and endangered species because the following mitigation measures would reduce potential effects to insignificance:

Visual/Aesthetics

- To minimize the degree of change and reduce visual impacts, techniques such as contour grading, slope rounding, and revegetation/replanting will be employed on the project site. Cut and fill slops will be contour graded and rounded to reflect the contours of the adjacent undisturbed topography, to the extent feasible.

- To minimize visual impacts resulting from the construction of soil nail retaining walls, a final surface texture and coloration mimicking natural rock would be applied.

- Trees removed during construction of the project will be replaced. All oak trees removed during construction with a diameter at breast height greater than 6 inches will be replaced at a ratio of 5:1. Native riparian trees with a diameter at breast height greater than 6 inches that are removed will be replaced at a ratio of 3:1. All other trees removed with a diameter at breast height greater than 6 inches will be replaced at a ratio of 1:1. Introduced tree species (such as the blue gum eucalyptus) that are removed will be replaced with native tree species appropriate to the area, particularly oaks. All trees will be planted after the completion of the roadway project, and will be planted within the project area whenever possible.

Animal Species

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about species of special concern having the potential to occur inside the project limits , and migratory birds, including information regarding sensitive resources that may exist in the biological study area, field identification and habitat requirements, and their legal status and protection under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the pallid bat, burrowing owl, western pond turtle, and migratory birds.

- Compensatory mitigation – If any, for burrowing owls that may be impacted by the project, will be determined during formal consultation with the California Department of Fish and Game.

Threatened and Endangered Species

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about the San Joaquin kit fox, Least Bell's vireo, California red legged frog, and the California tiger salamander, including information regarding sensitive resources that may exist in the biological study area, field identification and habitat requirements, how best to avoid an accidental take of an animal, and legal status and protection of the animals under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the San Joaquin kit fox, Least Bell's vireo, California red legged frog, and the California tiger salamander.

- Construction area delineation – Prior to any ground disturbing activities on the project site, the upstream and downstream boundaries of the project area will be delineated with either environmentally sensitive area fencing or solid barriers to prevent workers and equipment from straying from the project area.

- Entrapment avoidance – To prevent entrapment of animals during construction, all excavated, steep walled holes, or trenches more than two feet deep will be covered with plywood or similar materials at the end of each working day. Holes or trenches will have one or more escape ramp constructed of earth fill or wooden planks. All construction pipes, culverts, or similar structures with a diameter of 4 inches of more that are stored on the construction site for more than one night will be securely capped prior to storage, thoroughly inspected for animals before the pipe is buried, capped, or used. Before these holes or trenches are filled, they will be thoroughly inspected for trapped animals. If, at any time a San Joaquin kit fox, or California red legged frog is trapped and discovered, the United States Fish and Wildlife Service and the California Department of Fish and Game will be contacted.

- Vegetation removal – Vegetation required to be removed for the project will be removed between August 15 and October 15.

- Seasonal avoidance – To the extent practicable, construction will not occur during the wet season, when the California red legged frog and the California tiger salamander are more likely to disperse through upland habitats. Excepting for limited vegetation clearing that will be performed in the late winter/early spring, work in the terrestrial and riparian portions of the project area will be limited to the period between April 15 – October 15. Any construction that takes place within a wetland, stream, or riparian corridor is limited to the period between June 15 – October 15.

- Compensatory mitigation for any threatened and endangered species that may be impacted by the project will comply with Biological Opinion 81420-2008-F-1995 from the US Fish and Wildlife Service.

James B. Richards
Deputy Director, Environmental Planning and Engineering
District 4 (Oakland)
California Department of Transportation

3/10/10
Date

THIS PAGE INTENTIONALY LEFT BLANK

Table of Contents

APPENDICES

FIGURES

TABLES

THIS PAGE INTENTIONALY LEFT BLANK

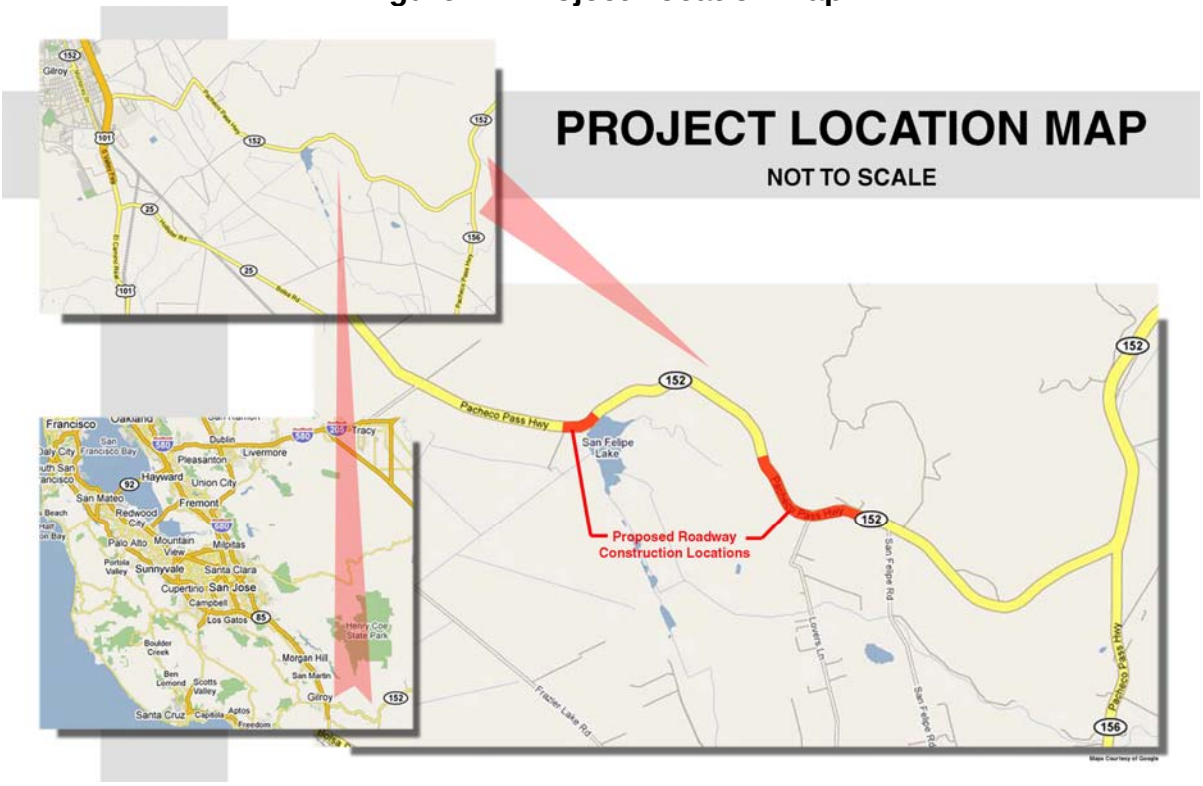
Chapter 1 – Proposed Project

1.1 Introduction

The California Department of Transportation (Department) proposes to implement safety improvements along route 152 east of Gilroy in Santa Clara County between Old Lake Road and San Felipe Lane. This project would improve sight distance, upgrade portions of the shoulders to current standards, and provide a left turn lane at the intersection of route 152 and Lovers Lane. The existing route is a two lane highway in a rural landscape, with standard 12 ft wide lanes, and shoulders ranging from one to six feet wide. Sight distances along the project are blocked in many places by trees. Figure 1 below shows the project location.

This project is included in the California 2004 State Highway Operation and Protection Program (SHOPP), and is funded from the "Two and Three-Lane Safety Monitoring" program within the SHOPP.

Figure 1 – Project Location Map



1.2 Purpose and Need

1.2.1 PURPOSE:

The purpose of this project is to improve the safety of this facility by constructing improvements that will reduce the number of cross-centerline accidents occurring within this segment of route 152.

1.2.2 NEED:

Data gathered from the Departments Traffic Accident Surveillance and Analysis System (TASAS) showed a high concentration of cross centerline accidents that occurred within the limits of this project, some fatal, during the study period of August 1, 2000, and July 31, 2008.

This segment of Route 152 is heavily used throughout the day and is at capacity during morning and afternoon peak hours, with a Level of Service (LOS) of E.

TRAFFIC AND ACCIDENT DATA

The 2007 average annual daily traffic (AADT) along this segment of Route 152 is 25,000 vehicles (12% trucks). This is expected to increase to a projected demand of 40,000 vehicles by the year 2027.

For the eight-year study period between August 1, 2000 and July 31, 2008, the accident rates per million vehicle miles along this segment of Route 152 and accident types are shown below. In the summer of 2006, the cross centerline accident data for this corridor was revisited. It was determined that these accidents could be reduced by constructing improvements at two spot locations, from PM 16.2-16.5 and from PM18.5-19.5, within the project limits. Since the proposed project will be constructed in two spot locations, as described in section 1.4, the accident data below is segregated to detail in information for each particular location. This data shows the "Fatal" accidents in location one are higher than the Statewide average, and that the total accident rate at location two is higher than the Statewide average.

Location 1 (PM 16.2-16.5) Accident Data:

Actual			State Highway Average		
F	F+I	Total	F	F+I	Total
.046	.46	1.29	.031	.41	.83

F = Fatal Accident Rate F+I = Fatal + Injury Accident Rate Total = Total Accident Rate

A detailed investigation determined that these accidents were caused by improper turns, speeding, the influence of alcohol or drugs, and various other violations and drivers' errors. Further study also revealed that an estimated eighteen percent of these accidents involved vehicles that had crossed the centerline. A comprehensive study of the traffic collision reports for these cross centerline accidents determined that most of them occurred under wet pavement conditions that could have been avoided by increasing pavement friction. Nonstandard super elevation rates for the curve of the roadway, and substandard paved outside shoulders were not found to be contributing factors in the cross-centerline accidents.

Location 2 (PM 18.5-19.5)

Actual			State Highway Average		
F	F+I	Total	F	F+I	Total
.014	.32	.85	.03	.40	.81

F = Fatal Accident Rate F+I = Fatal + Injury Accident Rate Total = Total Accident Rate

An investigation revealed that the accidents occurring within location 2 of the proposed project were caused by improper turns, speeding, the influence of alcohol, failing to yield, falling asleep, and other various traffic violations. The data showed that seventeen percent of the accidents within location two involved vehicles crossing the highway centerline. This study determined that increasing sight distance, widening the paved shoulders, and realigning the highway could reduce the number of cross centerline accidents.

Roadway Deficiencies

The existing highway shoulders throughout the project limits are one to six feet wide, not the current standard of eight feet wide. To correct this deficiency, the project proposes to widen shoulders to the current standard at spot locations within the project limits.

1.3 Project Description

This section describes the proposed build alternative developed by Caltrans to achieve the project purpose and need while avoiding or minimizing environmental impacts. The alternatives analyzed in this project include the Build Alternative Option A, Build Alternative Option B, and the No-Build Alternative.

1.4 Alternatives

1.4.1 PROPOSED BUILD ALTERNATIVE

The Build Alternative proposes safety improvements on Route 152, between Old Lake Road and San Felipe Lane (PM 16.2/19.5), east of the city of Gilroy in Santa Clara County. The safety improvements will be constructed at two spot locations; location one from PM 16.2/16.5 and location two PM 18.5/19.5. Improvements along location one will consist of repaving. Improvements at location two will improve sight distance, upgrade shoulders to current standards, and provide a left-turn channelization at the intersection of Route 152 and Lovers Lane. Options A and B of the build alternative concern the bridge located in location two, and are detailed below.

1.4.1.1 Existing Facility

Route 152 is an interregional east-west link between the San Joaquin and Santa Clara Valley areas. Route 152 within the project limits is a two lane undivided conventional highway, with standard 12 ft wide lanes, and non standard shoulders, ranging from one to six feet wide. A two foot wide soft median barrier, comprised of a rumble strip, is in the center of the highway. The road is situated in a rural landscape which features curving and rolling terrain.

1.4.1.2 Project Elements

Location One

Improvements made at location one will take place between PM 16.2 and 16.5. Elements of the project within location one include:

- Pavement overlay – The pavement will be overlaid with open grade asphalt to improve friction.

- Soft Median Barrier– The rumble strips currently in the center of the road will be retained.

Location Two

Improvements made at location two will take place between PM 18.5 and 19.5. Common elements of the project within location two for Options A and B include:

- Left Turn Channelization Lane – A 12 ft. wide left turn channelization lane will be constructed at the intersection of Lovers Lane and route 152. The lane will approximately begin 600 ft. east of Lovers Lane and will end approximately 400 ft. west of Lovers Lane. All widening will take place along the north side of the highway.

- Shoulder Widening – All shoulders will be widened from their current width of one to six feet, to the standard of eight feet wide. Shoulder widening will take place on both sides of the highway.

- Soft Median Barrier– Rumble strips will be constructed along the center, and in the shoulder of the highway.

- Pavement Overlay – The pavement will be overlaid with open grade asphalt to improve friction.

- Culvert lengthening – There are eleven culverts crossing route 152. These culverts ranging from 18-24 inches in diameter will be extended to accommodate the shoulder widening. Two culverts which cross the private driveways on the north side of route 152, five culverts crossing private driveways on the south side of route 152, and one culvert crossing Lovers Lane, may require replacement to accommodate shoulder widening.

- Driveway Conformity – All driveways currently terminating at route 152 will be conformed to meet the new shoulder grade.

- Retaining walls –Three retaining walls will be constructed on the north side of the highway to accommodate widening of the shoulders to standard widths of eight feet. Slight differences in wall heights would occur in options A and B, as detailed in the Table 1. These differences are due to slight differences in the alignment of the highway centerline. The approximate location for retaining walls 1-3 is shown in Figure 2.

Table 1 – Retaining Wall Details for Option A and Option B

Retaining Wall	Option A – Bridge Widening	Option B – No Bridge Widening
Retaining Wall 1 Approximately between stations 228 + 25 and 230 +25	Approximate maximum height of 15 feet, approximately 200 ft. long	Approximate maximum height of 15 feet, approximately 200 ft. long
Retaining Wall 2 Approximately between stations 235+50 and 246+75	Approximate maximum height of 20 feet, approximately 1,125 ft long	Approximate maximum height of 21 feet and approximately1,125 ft long
Retaining Wall 3 Approximately between stations 249+ 80 to 252 +80	Approximate maximum height of 20 feet high and approximately 300 ft long	Approximate maximum height of 22 feet and approximately 300 ft long.

Option A - This option involves widening the Holstein Creek Bridge, and constructing two retaining walls in addition to those identified in Table 1 near the bridge to avoid impacting a seasonal wetland, a known California Tiger Salamander breeding area, and impacts to Holstein Creek. Both shoulders and lanes on the bridge are currently standard widths. This option would accommodate realignment of the highway centerline.

Option A Elements

- Retaining Walls

  Wall four will be constructed to avoid the pond on the north side of the highway approximately from station 261+50 to 262+40, will have a maximum height of twelve feet, and will be approximately 90 feet long.

  Wall five will be constructed just north of the Holstein Creek on the south side of the highway, approximately from station 266+35 to 266+55. The wall will have a maximum height of five feet, and will be approximately twenty feet long.

- Bridge Widening – The Holstein Creek Bridge, bridge number 37-28, located at station 266+50, would be widened along the south side approximately three feet.

Option B – This option would not widen the Holstein Creek Bridge. Retaining walls number four and five would not be necessary, as no encroachment to the pond adjacent to the bridge, or into Holstein Creek itself would occur. This option accommodates slight changes to the highway centerline by shifting the new highway centerline to meet up with the current bridge centerline.

1.4.1.3 Construction

The following construction restraints for both Option A and Option B are the same.

Location One –

No digging will occur. The construction footprint is anticipated to be from the hinge point (the point of the road beyond the edge of the shoulder where the road begins to slope down) to the hinge point on either side of the road. All work will occur within the State's current Right of Way. Work occurring off the pavement will consist mainly of equipment overhang, and occasional off road driving to accommodate the pavement overlay equipment.

Location Two – Along the highway for the shoulder replacement, digging will occur a maximum of two feet deep. The existing substandard shoulder will be saw cut and then widened to bring it to current Caltrans standards. Construction of retaining walls one two and three will involve excavating the hillside and drilling holes. Equipment required for this work may include a drilling machine, pump, forklift, crane, and a backhoe. Digging will be no deeper than two feet below the current ground levels at the base of all walls. Vehicles and equipment will use the area between the current edge of the pavement and the temporary and permanent Right of Way lines for access, except for areas restricted by Environmentally Sensitive Area (ESA) fencing. Construction in any waterway, creek, or culvert will take place during the dry season, from approximately April 15 to October 15.

1.4.1.4 No Build Alternative

The No-Build Alternative would maintain the existing highway infrastructure as is, and would not include any improvements. This alternative serves as a benchmark for impact assessment, and would not satisfy the project's purpose and need.

1.4.2 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION

In October of 2001, the left turn pocket portion of this project was studied in an Initial Study/Negative Declaration (CEQA) Environmental Assessment/Finding of No Significant Impact (NEPA) for a Safety Improvements Project on State Route 152 in Santa Clara County. The left turn pocket was dropped from that project due to budget constraints.

In 2006, when a new project was introduced to construct the left turn pocket at Lovers Lane and State Route 152, longer project limits were introduced. While the improvements proposed for location two of the project remain the same, those at location one are much different. The original proposal called for the shoulders at location one to standard widths of eight feet. This proposal was eliminated due to its inability to avoid significant cultural and biological impacts.

2.1.1 IDENTIFICATION OF A PREFERRED ALTERNATIVE

In March of 2009, the Department formally selected Build Alternative Option B as the preferred alternative. This decision was made after considering comments made by outside agencies, the public, and the internal Project Development Team. Build Alternative Option B was chosen as it has fewer environmental impacts, is less expensive to construct, does not require bridge widening, has fewer retaining walls, and will have fewer construction staging impacts than Build Alternative Option A.

Since the publication of the Initial study in January 2009, the project design and footprint have been refined. During this process, the project footprint was reduced, which ultimately results in fewer potential impacts to the environment. While the project description remains the same, the biological impacts have been reduced. The new impact numbers can be found in the biology section of Chapter 2, sections 2.2.5-2.2.7.

Also, since the January publication, the Department has published new guidance on the issue of climate change. This document has been updated to reflect the new guidance, and can be found in Chapter 2, section 2.4.

Permits and Approvals Needed

The following permits, reviews, and approvals would be required for project construction:

Table 2 – Permits and Approvals

Agency	Permit/Approval	Status
United States Fish and Wildlife Service	• Section 7 Consultation for Threatened and Endangered Species • Review and Comment on 404 Permit	Biological Opinion 81420-2008-F-1995 received on March 3, 2010.
United States Army Corps of Engineers	• Non-reporting Section 404	Jurisdictional wetland delineation provided to USACE for concurrence on November 20, 2008.
California Department of Fish and Game	• 1600 Agreement for Lake and Streambed Alteration • Section 2080.1 Agreement for Threatened and Endangered Species • Consistency Determination for the California tiger salamander or Incidental Take Permit	Applications will be submitted during the design process (after March 2010). Need for the Consistency Determination or Incidental Take Permit will be made during the design process in consultation with the CDFG. One of these permits will be needed if the California tiger salamander is listed by the State as an endangered species before the project is completed.

Chapter 2 - Affected Environment, Environmental Consequences, and Avoidance, Minimization, and/or Mitigation Measures

This chapter presents the result of Caltrans' analysis of environmental issues relevant to this project. The following topics are discussed: land use, farmlands, utilities and emergency services, visual/aesthetics, cultural resources, hydrology and floodplains, geology/soils/ seismic/topography, and biology. These topics were identified by completing the California Environmental Quality Act (CEQA) checklist, which appears in Appendix A. The analysis in this chapter is based on technical studies and other reference materials. A list of these appears in Appendix G. They are available for examination and copying at the following address: California Department of Transportation, District 4, Office of Environmental Planning, 111 Grand Avenue, Oakland California, 94623-06600; telephone (510) 622-8717 (Voice), or use the California Relay Service TTY number, 1-887-735-2929.

As part of the scoping and environmental analysis conducted for the project, the following environmental issues were considered, and no adverse impacts were identified. Consequently there is no further discussion regarding these issues in this document.

- *Existing and Future Land Use* – The project does not affect existing or future land uses. No acquisition of residential or commercial structures is anticipated, and the project will not alter community interaction patterns.

- *Consistency with State, Regional and Local Plans and Programs* – The project is consistent with state, regional and local plans, transportation plans and programs.

- *Parks and Recreational Facilities* – There are no parks or recreation facilities affected by the project.

- *Growth* – The project is a safety project, and will not add capacity to the highway, and therefore will not induce growth in the surrounding area.

- *Community Character and Cohesion*- The project will not alter the character or cohesiveness of the existing neighborhoods or communities. It may increase ease of public access, with the addition of the left turn pocket, but will not decrease public access, divide a neighborhood, separate residences from community facilities, or increase isolation.

- *Relocations* – The project will not result in the relocation of any business or residence.

- *Environmental Justice* – There are no impacts concentrated in any area of minority or low income residents. The project will not cause disproportionably high and adverse effects on any minority or low-income populations.

- *Utilities/Emergency Services* – Three utility poles supporting PG&E electric distribution lines and AT&T communication lines are in conflict with the project. These facilities are low risk, and will be relocated prior to construction of the proposed project. No disruption to utilities or emergency services will occur as a result of the project.

- *Traffic and Transportation/Pedestrian and Bicycle Facilities* – As the project is a safety project, and does not increase capacity along the highway, it is anticipated that traffic circulation, as well as bicycle and pedestrian activities will not be affected. While traffic control measures will be put into place during construction of the project, no impacts are anticipated.

- *Paleontology* – The project will not affect paleontological resources.

- *Hazardous Waste/Materials* – The project will not result in any increased hazardous materials risks after construction. During the design phase of project development, once the exact location of all land to be excavated is known, detailed soil and asbestos surveys will be conducted by the Caltrans Office of Environmental Engineering. Any hazardous materials found will be encased or disposed of in accordance with applicable federal and state regulations.

- *Air Quality* – This project is exempt from air quality conformity determination requirements.

- *Noise* – The project will not cause or contribute to a substantial long-term increase in noise levels because there will be no increase in traffic capacity. The shift to the new alignment will not affect sensitive receptors in the project area. Standard construction management practices are adequate to prevent adverse noise impacts during construction.

- *Natural Communities* – No biological natural communities will be adversely affected by the project. Habitat for certain animal species will be affected, and these effects are discussed in the animal species section.

As both of the proposed project options are similar in nature, the information set forth in the regulatory setting, affected environment, environmental consequences, and avoidance, minimization, and/or mitigation measures sections throughout the chapter is the same for both options, unless specifically noted otherwise.

2.1 Human Environment

2.1.1 FARMLANDS

2.1.1.1 Regulatory Setting

The California Environmental Quality Act requires the review of projects that would convert Williamson Act contract land to non-agricultural uses. The main purposes of the Williamson Act are to preserve agricultural land and to encourage open space preservation and efficient urban growth. The Williamson Act provides incentives to landowners through reduced property taxes to deter the early conversion of agricultural and open space lands to other uses.

2.1.1.2 Affected Environment

In 2007, More than 16.6 million acres – about half of California's agricultural land were enrolled in the Williamson Act program. Along the project alignment, three parcels with Williamson Act contracts will be affected. Approximately 1.504 acres of land contracted

under the Williamson Act under Option A, and 1.498 acres under Option B will be converted to use by the highway system.

Mapping completed by the California Department of Conservation in 2006, shows that the land adjacent to the highway on the proposed project site is labeled as grazing land. The mapping defines grazing land as: land on which the existing vegetation is suited to the grazing of livestock. This mapping shows that currently the county has 388,510 acres of grazing land. Approximately 5.8 acres of grazing land under Option A, and 6.06 acres of grazing land under Option B, in addition to land under Williamson Act contract, will be converted to use by the highway system.

2.1.1.3 Environmental Consequences

As the amount of land under contract by the Williamson Act to be used by the project is so minimal, approximately 1.5 acres, and approximately 5.8 acres of grazing land, that no adverse environmental consequences are anticipated.

2.1.1.4 Avoidance, Minimization, and/or Mitigation Measures

Throughout the planning process, effort has been made to keep the project footprint as small as possible. As there will be no adverse effect to farmlands in the proposed project area, no mitigation measures are necessary.

2.1.2 VISUAL/AESTHETICS

2.1.2.1 Regulatory Setting

The California Environmental Quality Act (CEQA) establishes that it is the policy of the state to take all action necessary to provide the people of the state "with…enjoyment of *aesthetic*, natural, scenic and historic environmental qualities." (CA Public Resources Code Section 21001[b]).

2.1.2.2 Affected Environment

A Visual Impact Assessment (VIA) was completed for this project in November of 2008. The VIA reviewed conditions on a regional scale first, and then the specific visual conditions within the project limits. As the work at location one is limited to repaving work only, the study address' the changes to the roadway at location two only.

The proposed project is located in an area that is not designated or eligible to be listed as a Designated State Scenic Highway. This area is also not designated as a Santa Clara County Scenic Highway.

The visual character of the project area is entirely rural. Views that travelers experience along Route 152 are dominated by agricultural uses including crop fields, grazing lands, barns and other farm buildings. Travelers along the route see rolling grassy foothills dotted with native trees as a backdrop to scattered private residences. Mature trees and shrubby vegetation occur along some sections of the highway. Along many portions of the highway, significant roadside vegetation is absent, allowing long distance views of the landscape.

Viewers within the project area are primarily motorists traveling along Route 152. They include those who live or work in or near the project area, those engaged in commerce

along Route 152, truckers, tourists, and those traveling for pleasure through the area. Based on the activities of these viewer groups, viewer sensitivity is considered moderate to low.

The project area's visual quality was evaluated by assessing three visual characteristics of the project viewshed described above. These characteristics are:

- Vividness – the visual power or memorability of landscape components as they combine in distinctive visual patterns.

- Intactness – the visual integrity of the natural and man-made landscape and its freedom from encroaching elements

- Unity - the visual coherence and compositional harmony of the landscape considered as a whole.

The level of vividness within the project area is moderate. While there are no individual landscape features or characteristics that are especially memorable, the rural surroundings and steepness of the hills along several portions of the north side of the highway leave a lasting impression. The intactness of the area is moderate, mainly due to the general absence of visually encroaching or strongly incongruent features. The unity of the landscape within the project area is fairly high due to the pervasive and generally consistent nature of agricultural land uses and the associated development that occupies the area surrounding the highway. At the same time however, these land uses have nearly replaced the natural landscape. Based on this assessment, the existing visual quality along the highway corridor where the project is located is judged to be at a moderate level.

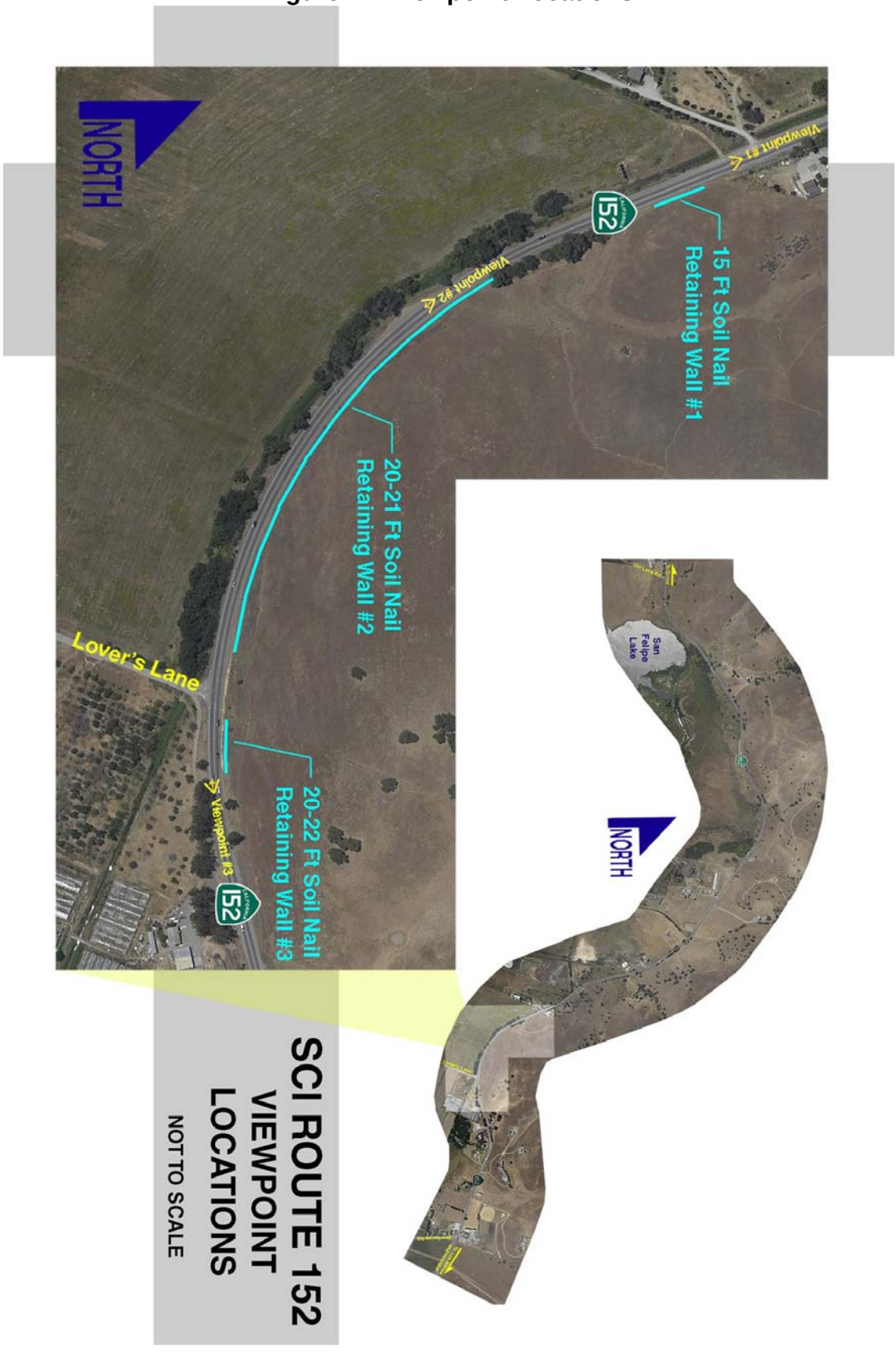
2.1.2.3 Environmental Consequences

Once the proposed project is completed, changes in the appearance along the highway corridor would be evident, due mostly to the removal of trees and the addition of the retaining walls while widening of the shoulders would be a less obvious change. The changes in appearance would not substantially alter the visual character of the area or its scenic quality. The levels of vividness, intactness, and unity of the landscape would not change substantially. The proposed retaining walls have the potential to affect the intactness of the highway corridor. Scenic vistas would not be adversely affected, and no landscape elements that could be considered Scenic Resources would be damaged or removed.

Over time, replacement trees and plantings would mature and become prominent features along the corridor. These plantings are described in more detail in the next section, as well as in the plant species section 1.7.5.

It is not practical to analyze every view from the highway in which the proposed project will be viewed. It is therefore necessary to select a number of representative viewpoints that most clearly display the visual effects of the project. Three separate viewpoints were chosen to graphically depict the post-construction appearance of the project, and to evaluate its visual effects in detail. The locations of these viewpoints are shown in Figure 2.

Figure 2 – Viewpoint Locations



Viewpoint 1

Viewpoint one is located in the eastbound traffic lane of Route 152, approximately .4 miles west of Lovers Lane. This view looks to the east.

Currently, as shown in Figure 3, the highway curves to the left. A grassy hill, flanked on either end by trees and shrubs, has a fence at the edge of the north side of the road. The paved shoulders are three feet wide on both sides of the highway.

The simulated view of the same area after construction is shown below in Figure 4. The road is shown slightly realigned to the left, and widened to provide eight foot wide paved shoulders on both sides of the road. Driver sight distance of the road ahead is noticeably improved. The slope of the hill at the north edge of the road has been cut to accommodate the widening, and is supported by a retaining wall with a maximum height of 15 feet. The existing visual character is maintained and visual quality is not diminished.

Viewpoints 2A and 2B

Viewpoints 2A and 2B show the same general area, from two different directions. Viewpoint 2A is located at the edge of the eastbound traffic lane of Route 152 approximately .25 miles west of Lovers Lane. This view looks to the east.

Currently, as seen in Figure 5 the highway curves to the left around and behind a large grassy hill, at the edge of the north side of the road. The shoulders of the road are four feet wide.

The simulated view of the same area after construction of the project is shown in Figure 6. In this view, the road has been realigned to the left and widened to provide eight foot wide shoulders on both sides of the road. Driver sight distance of the road ahead is improved. The slope at the north edge of the road has been cut to accommodate the widening, and is supported by a retaining wall with a maximum height of 21 feet. While the changes to the roadway are noticeable, the post project condition is not unsightly. The existing visual character is maintained and visual quality is not diminished.

Viewpoint 2B is located on the south shoulder of Route 152, approximately 500 feet west of Lovers Lane. This view looks to the west. Currently, as seen incurrent Figure 7, the highway curves to the right and disappears from view. A grassy hilltop extends to the edge of the north side of the road, and paved shoulders on either side of the highway range from two to four feet wide.

The simulated view of this area after construction of the project is shown in Figure 8. The road is shown realigned to the right, and widened on both sides to provide eight foot wide shoulders. The bottom of the hill at the north edge of the road has been cut to accommodate the realignment and widening of the highway, and is supported by a retaining wall with a maximum height of 21 feet. The removal of trees and shrubs from the south side of the highway are featured in the simulation. This opens the view to the southwest and exposes other trees located farther back from the roadway. These changes are noticeable, but not unsightly. The existing visual character is maintained and visual quality is not diminished.

Viewpoint 3

Viewpoint 3 is located on the south shoulder of Route 152, approximately 400 feet east of Lovers Lane. This view looks to the west, as shown in Figure 9. Currently the highway curves to the right and disappears from view behind a grassy hill that extends to the north side of the road. Shoulders on both sides of the highway are four feet wide. There is a stand of eucalyptus trees along the south side of the highway.

The simulated view of this area after construction is shown in Figure 10. It shows the highway realigned to the right, and widened on both sides to provide eight foot wide shoulders. Driver sight distance is improved due to the road improvements. The hill at the north edge of the road has been cut to accommodate the realignment and widening, and the cut slope is supported by a retaining wall with a maximum height of 22 feet. The eucalyptus trees along the south side of the highway have been removed, along with the additional trees farther ahead. This substantially opens up the view to the southwest and exposes a paved driveway off of Lovers Lane. While these changes are noticeable, they are not unsightly. The existing visual character is maintained and visual quality is not diminished.

2.1.2.4 Avoidance, Minimization, and/or Mitigation Measures

Caltrans mandates that a qualitative/aesthetic approach be implemented to mitigate for visual quality loss in the project area, and to address the actual cumulative loss of visual quality that will occur in the project viewshed once the project is completed.

To minimize the degree of change and reduce visual impacts, techniques such as contour grading, slope rounding, and revegetation/replanting will be employed on the project site. Cut and fill slops will be contour graded and rounded to reflect the contours of the adjacent undisturbed topography, to the extent feasible. Grading operations should not result in angular landforms.

All exposed ground surfaces should be hydroseeded with appropriate plant species as early as possible to control erosion (no later than October 31). The visual impact of the disturbed areas will diminish as revegetation occurs adjacent to the project site.

Trees removed during construction of the project will be replaced. The details and ratio of tree replacement is discussed in the plant species avoidance, minimization and or mitigation section 1.7.5.4. Trees will be replaced onsite to the extent possible after the project is constructed. Offsite planting will occur only if replacement on site is not possible.

All retaining walls shall have a final surface texture and coloration that mimics natural rock similar to that of the existing retaining wall on Route 152, east of San Felipe Road. An example of this texture and coloration can be seen in figures 3-10.

Figure 3 – Viewpoint 1 Existing
This figure, showing existing conditions, is located in the eastbound traffic lane of Route 152, approximately .4 miles west of Lovers Lane. This view looks to the east.

Figure 4 – Viewpoint 1 Simulated
This figure is the simulated view of the same area after construction.

Figure 5 – Viewpoint 2A Existing
This figure, showing existing conditions, is located at the edge of the eastbound traffic lane of Route 152 approximately .25 miles west of Lovers Lane. This view looks to the east.

Figure 6 – Viewpoint 2A Simulated
This figure shows a simulated view of the same area after construction of the project

Figure 7 – Viewpoint 2B Existing
This figure, showing existing conditions, is located on the south shoulder of Route 152, approximately 500 feet west of Lovers Lane. This view looks to the west.

Figure 8 – Viewpoint 2B Simulated
This figure shows a simulated view of this area after construction of the project.

Figure 9 – Viewpoint 3 Existing
This figure shows existing conditions and is located on the south shoulder of Route 152, approximately 700 feet east of Lovers Lane.

Figure 10 – Viewpoint 3 Simulated
This figure shows a simulated view of this area after construction.

2.1.3 CULTURAL RESOURCES

2.1.3.1 Regulatory Setting

"Cultural resources" as used in this document, refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

Historical resources are considered under the California Environmental Quality Act (CEQA), as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way.

2.1.3.2 Affected Environment

For this project, the Department prepared a Historic Property Survey Report (HPSR), a Historical Resources Evaluation Report (HRER) and an Archaeological Survey Report (ASR) in July of 2008.

An Area of Potential Effects (APE) was established to assess potential project impacts. The APE for architectural history studies was comprised of all properties adjacent to State Route 152, along the entire length of both project segments. The APE for archaeological studies consisted of the project's construction footprint (including existing Right of Way, proposed Right of Way, temporary and permanent easements), and included an archaeological site adjacent to the footprint and highway. Detailed studies consisting of record and literature searches, field reviews, along with analysis of Department maps and site records were undertaken by the Department's Professionally Qualified Staff, and data from their efforts was used to write the various technical reports listed above.

One archaeological site adjacent to the proposed highway improvements was identified within the archaeological APE. Within the architectural history APE, three resources were identified and evaluated. While none of these properties meet the criteria for listing on the National Register of Historic Places, one resource, the Uriah Wood residence at 5411 Pacheco Pass Highway, is a designated Santa Clara County landmark, and is considered a historical resource for CEQA purposes.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the County Coroner contacted. Pursuant to Public Resources Code Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC) who will then notify the Most Likely Descendent (MLD). At that time, the person who discovered the remains will contact the Caltrans District 4 Office of Cultural Resource Studies so that they may work with the MLD on the respectful treatment and disposition of the remains. Further provisions of PRC 5097.98 are to be followed as applicable.

2.1.3.3 Environmental Consequences

The Department concluded in the HPSR a finding of no adverse effect to the archaeological site and no substantial adverse change, as the impacts to the resource at 5411 Pacheco

Pass Highway (the Uriah Wood property) include only minor Right of Way acquisition and fill along the property's highway frontage. These alterations to the property will not impair the significance of the historical resource. It is anticipated that there will be no effect to the archaeological site located adjacent to the highway.

2.1.3.4 Avoidance, Minimization, and/or Mitigation Measures

While no effects to the archaeological site adjacent to the proposed project are anticipated, in order to protect the site from inadvertent damages, the site and a surrounding buffer within the state Right of Way will be designated as an Environmental Sensitive Areas (ESA) for the duration of the project.

2.2 Physical Environment

2.2.1 HYDROLOGY AND FLOODPLAIN

2.2.1.1 Regulatory Setting

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A.

In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The base floodplain is defined as "the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year." An encroachment is defined as "an action within the limits of the base floodplain."

2.2.1.2 Affected Environment

A Location Hydraulic Study Report was completed for this project in December 2008. The project is generally outside the 100-year base floodplain boundary based on the Flood Insurance Rate Maps (FIRM) completed by the Federal Emergency Management Agency (FEMA) in 1982 and 1991. An earlier Floodplain Information Study by the U.S. Army Corps of Engineers (ACOE) in 1973 also indicated the similar conclusion. FEMA floodplain maps are presented in Appendix F.

For project Location One, the maps indicate that a small portion of the project just north of the San Felipe Lake is near the 100-year floodplain boundary. However, the project in this location is generally higher than the 100-year flood level and will not encroach the floodplain.

For project Location Two, the maps indicate that a portion of the project, from the beginning of Location Two to about 500 feet east of Lovers Lane, is near the 100-year flood boundary. The project in this reach is generally above the 100-year flood levels and will not encroach the floodplain, except for a small segment of about 400 feet just east of Lovers Lane. The extended new roadway embankment slopes in this small segment appears to be close to the 100-year floodplain. However, the area is of minor concern when compared to the size of the floodplain, making the effect of any potential floodplain encroachment insignificant.

2.2.1.3 Environmental Consequences

The project is close to the 100-year floodplain limit east of Lovers Lane for about 400 feet along the embankment of route 152. Any potential encroachment is insignificant when compared to the entire adjacent floodplain. The project would slightly increase the impervious area, by approximately 1 acre. This increase is relatively small, and insignificant when compared to the upland drainage areas. The widening of the bridge would not affect the headwater elevations at the bridge based on the preliminary hydraulics analysis.

Neither of the options for the bridge proposed for this project would result in risk to the floodplain and would not impact the natural and beneficial floodplain values. This project would not result in or support incompatible floodplain development.

2.2.1.4 Avoidance, Minimization, and/or Mitigation Measures

As there are no effects to hydrology or floodplains, no avoidance, minimization or mitigation measures are necessary.

2.2.2 WATER QUALITY AND STORM WATER RUNOFF

2.2.2.1 Regulatory Setting

Section 401 of the Clean Water Act (CWA) requires water quality certification from the State Water Resources Control Board (SWRCB) or from a Regional Water Quality Control Board (RWQCB) when the project requires a CWA Section 404 permit. Section 404 of the CWA requires a permit from the U.S. Army Corps of Engineers (USACE) to discharge dredged or fill material into waters of the United States.

Along with CWA Section 401, CWA Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) permit for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and nine RWQCBs. The SWRCB and RWQCB also regulate other waste discharges to land within California through the issuance of waste discharge requirements under authority of the Porter-Cologne Water Quality Act.

The SWRCB has developed and issued a statewide NPDES permit to regulate storm water discharges from all Department activities on its highways and facilities. Department construction projects are regulated under the Statewide permit, and projects performed by other entities on Department right-of-way (encroachments) are regulated by the SWRCB's

Statewide General Construction Permit. All construction projects over 1 acre require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. Department activities less than 1 acre require a Water Pollution Control Program.

2.2.2.2 Affected Environment

A Water Quality Report and Storm Water Data Report were written for this project in November of 2008.

The proposed project is located along the western boundary of the Pajaro River Pacheco Santa Ana Creek Hydrologic Sun-Area watershed. Nearby water bodies include San Felipe Lake and the Tequisquita Slough at the western end of the project, and Spring Creek at the east end of the project. There are no identified high risk areas close to the project limits.

2.2.2.3 Environmental Consequences

Caltrans conducts a variety of studies that monitor and highway storm water runoff throughout the State. Sources of water pollution from this runoff are natural erosion, phosphorus from tree leaves, combustion products from fossil fuels, trash and falling debris from motorists and vehicle brake pad wear.

Excavation will disturb approximately 11.9 acres of soil to accommodate the widening of the highway shoulders. It is anticipated that the project will create storm water impacts - as soil disturbance is extensive, additional impervious pavement will be added, and permanent erosion control will be incorporated on disturbed slopes.

Waters of the State may be impacted from excavation or run-off infiltration in areas where high groundwater may be present during construction. The project is located in the northern perimeter of the Gilroy-Hollister Valley Groundwater Basin Hollister Area Subbasin 303.03. Groundwater levels in this basin overall were declining, but have generally risen since 1987.

2.2.2.4 Avoidance, Minimization, and/or Mitigation Measures

A Storm Water Pollution Prevention Plan (SWPPP) will document the water pollution control practices. Paved areas will be kept to a practical minimum in an attempt to attenuate peak discharges and reduce water quality impacts.

Project mitigation will be accomplished by complying with the Departments' Statewide Permit and the SWMP. Avoidance and minimization measures for storm water will be accomplished by implementing an approved Best Management Practices (BMPs), which are broken down into four general categories: Pollution Prevention, Construction, Treatment, and Maintenance BMPs.

Pollution Prevention BMPs are permanent water quality controls used to reduce pollutant discharges by preventing erosion. These are standard, technology based, non-treatment controls selected to reduce pollutant discharges to the maximum extent practicable (MEP) requirements. These BMPs include preserving the existing vegetation, concentrated flow conveyance systems (ditches, berms, dikes, swales, overside drains, outlet protection) and slope/surface protection systems.

Construction site BMPs are temporary controls used to reduce pollutant discharges during construction. These controls may include soil stabilization, sediment control, wind erosion control, tracking control, and non-storm water management and waste management.

Treatment BMPs are permanent water quality controls that remove pollutants from storm water runoff prior to being discharged from the Department's Right of Way. These include traction sand traps, infiltration basins, detention devices, biofiltration strips/swales, and Gross Solid Removal Devices.

Maintenance BMPs are used to reduce pollutant discharges during highway maintenance activities. These include litter pickup, toxic control, and street sweeping.

Selection and design of permanent project BMPs will be refined as the project progresses through the planning stage and into final design.

The following BMPs will be incorporated into the project.

- Any velocity increases resulting from the increased discharge from paved shoulder areas will be mitigated by appropriate energy dissipation devices.

- The project will discharge into unlined channels.

- The project will not encroach, cross, realign, nor cause any other hydraulic changes to a stream that may affect downstream channel stability.

- Biofiltration Swales, biofiltration strips, and infiltrations trenches are being considered for incorporation throughout the project.

2.2.3 GEOLOGY/SOILS/SEISMIC/TOPOGRAPHY

Topographic and geologic features are protected under the California Environmental Quality Act. This section discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Department's Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

2.2.3.1 Affected Environment

A preliminary Geotechnical Report was prepared for this project in November of 2008. The report found that within the project limit, where the highway crosses natural drainages, alluvial fans or stream deposits underlie the roadway. Otherwise the road is constructed on shallow cuts in bedrock.

Borings from along the alignment indicate that the oldest rocks within the project limits are comprised of an unnamed Cretaceous sandstone, mudstone, and conglomerate. This unit is moderately to thinly bedded, moderately to intensely weathered, and intensely fractured. The fractures are typically filled with moist firm orange clay. An unnamed sandstone is also found below the highway, however, its exposure is limited to a few hundred feet. The

Quaternary Packwood Gravels, the youngest unit, are exposed along the western end of the alignment.

Little evidence was found regarding groundwater elevations along the project alignment. In general, higher groundwater elevations should be expected along south flowing drainages as well as areas of lower elevation along the eastbound lane. An examination of aerial photos yielded some evidence of shallow groundwater along portions of the highway. These areas are located along the eastbound lane near San Felipe Lake, and an area south of the roadway at station 170.

The project area is located in a seismically active area. The southern end of the Calaveras fault crosses the western portion of the project. The Sargent and San Andreas faults to the west of the project area and the Hayward fault to the north of the project area affect this area as well.

2.2.3.2 Environmental Consequences

During a significant seismic event, the project area would be exposed to hazards such as fault rupture, strong ground shaking, subsidence (a gradual sinking to a lower level), and liquefaction. The following table lists the nearest faults, their maximum seismic magnitude, and peak ground accelerations during maximum seismic events.

Table 3 – Project Area Fault Information

Fault	Distance from project	Maximum Credible Earthquake	Peak Ground Acceleration
Calaveras	0 km	7.5	.70g
San Andreas	14 km	8.0	.45g
Quien Sabe	4 km	6.25	.45g
Sargent	10 km	6.75	.32g

Hazards occurring from seismic activity are classified as primary, or secondary. Primary seismic hazards in these areas include surface rupturing, and fault creep. In the case of a seismic event in the project area, some damage will occur as a result of fault creep and rupture. Any damage should be repairable. The project does not propose to create any unmitigatable impacts on the existing roadway.

Secondary seismic hazards include ground shaking and liquefaction. Loose saturated soils pose the greatest threat during episodes of strong shaking. The probability of loose soils within the project limits is moderate to low. Some settlement of pavement and minor cracking could be expected during a moderate to strong earthquake, yet repairs to the highway would be minor. Settlement potential exists within the project limits, but no embankments or shallowly founded structures are included in the proposed project for which settlement would require mitigation.

Liquefaction potential, when soils lose all shear strength and turn essentially to fluids, is considered moderate to high in the project area. Some liquefaction may occur during a seismic event below the shallow water table along the highway. This risk can be mitigated by using piles to support the bridge widening in Option A. Option B on the other hand proposes no additional risks, and requires no mitigation.

Throughout the project area few landslide scars are visible from aerial photos, and there are no exposures of rock capable of generating large rockfall along the alignment. The potential for slides and rockfall that would negatively impact the project is considered low. The three soil nail retaining walls are proposed to accommodate the widening along the highway. While some raveling of the rock during construction may take place, large scale slope instability is not considered to be an issue during construction.

2.2.3.3 Avoidance, Minimization, and/or Mitigation Measures

No specific structure mitigation measures are required for Option B. To prevent potential liquefaction impacts to the proposed bridge structure widening in Option A, construction piles will be used to support the structure below potential liquefiable zones.

As the possibility of densification of loose soils is moderate to low within the project limits, any embankments or fills will be sufficiently compacted. In areas where liquefaction hazards exist, the proposed improvements are limited to paving.

All retaining walls shall have a final surface texture and coloration that mimics natural rock similar to that of an existing retaining wall on Route 152, east of San Felipe Road.

Erosion within the project limits should be limited, as temporary cuts are anticipated to be made in rock with low susceptibility for erosion. Best management practices (BMP's) during construction will mitigate potential erosion. BMP's are discussed in further detail in the Water Quality section 2.3.2.4.

2.2.4 WETLANDS AND OTHER WATERS

2.2.4.1 Regulatory Setting

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (33 U.S.C. 1344) is the primary law regulating wetlands and waters. The Clean Water Act regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the Clean Water Act, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the Clean Water Act.

Section 404 of the Clean Water Act establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (USACE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If the CDFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. CDFG jurisdictional limits are usually defined by the tops of the stream or lake banks, or the outer edge of riparian vegetation, whichever is wider. Wetlands under jurisdiction of the USACE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of the Clean Water Act. Please see the Water Quality section for additional details.

2.2.4.2 Affected Environment

A Natural Environment Study (NES) was completed for this project in October of 2008. A biological study area (BSA) was defined within the NES to evaluate potential effects to natural resources from the proposed project. The BSA was defined separately for each segment of the project, due to the differences in the project activities planned for each location. The BSA for location one (PM 16.2-16.5), consisted of the Caltrans right of way (ROW), extending about 30 feet from the highway centerline, on either side of the road. The BSA for location two (PM 18.5-19.5) was defined to be fifteen feet beyond the existing and proposed ROW, including all temporary construction easements, or 50 feet from the edge of the existing pavement, whichever was larger. As work at location one shall be restricted to the existing pavement, all effects discussed throughout the chapter are in regard to location two.

Within the BSA, a survey for wetlands and other waters of the U.S. was conducted for the Department, following methods set forth in United States Army Corps of Engineers (USACE) regulations. Using these methods a jurisdictional wetland map was delineated. At publication time, this delineation had not been verified by the USACE, and results discussed below are subject to change upon USACE review.

For Option A, the jurisdictional delineation mapped a total of 1.242 acres of “potentially jurisdictional” features within the BSA. These features include .230 acres of “other waters of the U.S.”, a term used to characterize water bodies, such as intermittent streams, that do not meet the full criteria for wetlands designation. These features also include 1.012 acres of seasonal and perennial wetlands, including a .069 - acre seasonal pond, and emergent and forested wetlands within waters associated with Ortega Creek and its tributaries. These

features overlap California Tiger Salamander (CTS) critical habitat, which is discussed in the Threatened and Endangered Species section 1.7.7.

Option B will have no temporary or permanent impacts to the Holstein Creek channel, given that the Holstein Creek Bridge would not be widened and equipment would not be staged within the creek channel.

2.2.4.3 Environmental Consequences

Proposed project location two is situated within the Ortega Creek Watershed, and has two intermittent drainage features that pass through it: Holstein Creek and Ortega Creek. Ortega Creek drains west from the project to San Felipe Lake. Holstein Creek drains west from the hills to the north of the project segment, and proceeds to run under the highway.

Currently, Holstein Creek enters the BSA from the eastern end of the project. It intersects with Ortega Creek to the southwest of the BSA. Ortega Creek flows eight to ten months a year through the BSA, paralleling the southern side of highway 152. Year round emergent wetlands and forested wetlands occur under the channel of Ortega Creek. A seasonal pond wetland is connected to Holstein Creek through a box culvert that extends across the highway.

Proposed project Option A will result in a total permanent impact of .001 acres of "other waters of the U.S." affecting a narrow, short lived drainage tributary to Holstein Creek, located on the southern side of the highway. The project will also result in .091 acres of temporary impacts to Holstein Creek, on the south side of the Holstein Creek Bridge, located approximately at PM 19.24. This impact will be the result of extending the existing double box culvert three feet south of its current location. This impact will not stop water flow, but will change .002 acres of the creek on the south side of the bridge from its current status of an "other water of the U.S." feature, to a "culverted waters of the U.S." feature.

This option will also result in temporary impacts to .044 acres of a seasonal pond wetland located on the north side of the highway at approximate PM 19.15. This temporary impact would be caused by the construction of retaining wall 5.

The total estimated impact to aquatic features under Federal jurisdiction will consist of .001 acres of permanent impacts, and .044 acres of temporary impacts to wetlands.

Option B will result in a slight increase to a short lived tributary to Holstein creek, totaling .23 acres. It will also result in permanent impacts of .001 acres to a short lived drainage that connects a seasonal pond wetland to a box culvert that runs under the highway. This is an impact that does not occur under Option A. Option B will permanently impact a total of .024 acres of "other waters of the U.S."

2.2.4.4 Avoidance, Minimization, and/or Mitigation Measures

After reviewing the results of the jurisdictional wetlands delineation, the project design was altered to avoid impacts to wetlands, and other jurisdictional waters within the project limits to the greatest extent possible. This included shifting the proposed future alignment of the road, the addition of retaining wall 5 to Option A, and the creation of Option B. These design alterations avoided permanent impacts the wetlands for Option B, reduced permanent impacts for Option A to .001 acres, and reduced temporary impacts for Option A to .044 acres, with no temporary impacts from Option B.

In addition to the avoidance measures, during construction impacts will be minimized by marking the boundaries of the construction areas with ESA fencing.

All temporary impacts to wetlands and other waters will be restored to their preconstruction conditions to the maximum extent feasible. For Option A, as construction and equipment staging may occur in the wetland area, a 404 permit from the USACE is required. For Option B, as the total impacts to aquatic features will be less than one-tenth of an acre, a non-reporting 404 permit from the USACE is required.

2.2.5 PLANT SPECIES

2.2.5.1 Regulatory Setting

The U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Game (CDFG) share regulatory responsibility for the protection of special-status plant species. "Special-status" species are selected for protection because they are rare and/or subject to population and habitat declines. Special status is a general term for species that are afforded varying levels of regulatory protection. The highest level of protection is given to threatened and endangered species; these are species that are formally listed or proposed for listing as endangered or threatened under the Federal Endangered Species Act (FESA) and/or the California Endangered Species Act (CESA). Please see the Threatened and Endangered Species section 1.7.7 for detailed information regarding these species.

This section of the document discusses all the other special-status plant species, including CDFG fully protected species and species of special concern, USFWS candidate species, and non-listed California Native Plant Society (CNPS) rare and endangered plants.

The regulatory requirements for FESA can be found at United States Code 16 (USC), Section 1531, et seq. See also 50 CFR Part 402. The regulatory requirements for CESA can be found at California Fish and Game Code, Section 2050, et seq. Department projects are also subject to the Native Plant Protection Act, found at Fish and Game Code, Section 1900-1913, and the California Environmental Quality Act, Public Resources Code, Sections 2100-21177.

2.2.5.2 Affected Environment

A Natural Environment Study (NES) was completed for this project in October of 2008. A biological study area (BSA) was defined within the NES to evaluate potential effects to natural resources from the proposed project. The BSA was defined separately for each segment of the project, due to the differences in the project activities planned for each location. The BSA for location one (PM 16.2-16.5), consisted of the Caltrans right of way (ROW), extending about 30 feet from the highway centerline, on either side of the road. The BSA for location two (PM 18.5-19.5) was defined to be fifteen feet beyond the existing and proposed ROW, including all temporary construction easements, or 50 feet from the edge of the existing pavement, whichever was larger. As work at location one shall be restricted to the existing pavement, all effects discussed throughout the chapter are in regard location two.

A tree survey was conducted within the BSA on July 28, 2008. All trees anticipated to be removed as a result of the project were identified by species, measured at a diameter at breast height of 4.5 ft. above grade (dbh), and mapped with a handheld GPS device

A rare plant study was conducted in March, April, and May of 2008, to look for any special status plants with the potential to grow within the BSA. None were found. As there is no potential for any special status plant species to occur within the BSA. Therefore there shall be no additional discussion regarding special status plant species.

2.2.5.3 Environmental Consequences

There are 46 trees within the project footprint with dbh's in excess of six inches which may require removal. These trees include seven coast live oak, five valley oak, one canyon live oak, one red willow, one California black walnut, twenty-nine blue gum eucalyptus trees, and two blue elderberry shrubs. All of the trees are less than 72 inches in diameter, and under 50 feet tall.

2.2.5.4 Avoidance, Minimization and/or Mitigation Measures

The project footprint has been reduced from the originally studied impact discussed in the January 2009 document to avoid impacts to trees. Trees will be trimmed, not removed whenever possible, and only trees requiring removal due to roadway or visibility conflict will be cut down.

All oak trees removed during construction with a dbh greater than 6 inches will be replaced at a ratio of 5:1. Native riparian trees removed with a dbh greater than 6 inches will be replaced at a ratio of 3:1. All other trees removed with a dbh greater than 6 inches will be replaced at a ratio of 1:1. Introduced tree species (such as the blue gum eucalyptus) that are removed will be replaced with native tree species appropriate to the area, particularly oaks. All trees will be planted after the completion of the roadway project, and will be planted within the project area whenever possible. Table 4 below shows the number of trees potentially removed by each option, and the anticipated tree replacement numbers.

Table 4 – Tree Replacement by Option

Tree Type	Option A Impacts	Option A Mitigation	Option B Impacts	Option B Mitigation
Oak Trees	21	105	13	65
Riparian Trees	N/A	N/A	4	12
Other Trees	37	37	29	29

2.2.6 ANIMAL SPECIES

2.2.6.1 Regulatory Setting

Many state laws regulate impacts to wildlife. The California Department of Fish and Game (CDFG) are responsible for implementing these laws. This section discusses potential impacts and permit requirements associated with wildlife not listed or proposed for listing under the state Endangered Species Act. Species listed or proposed for listing as threatened or endangered are discussed in Section 1.7.7. All other special-status animal

species are discussed here, including CDFG fully protected species and species of special concern.

State laws and regulations pertaining to wildlife include the following:

- California Environmental Quality Act
- Sections 1600 – 1603 of the Fish and Game Code
- Section 4150 and 4152 of the Fish and Game Code

2.2.6.2 Affected Environment

A Natural Environment Study (NES) was completed for this project in October of 2008. A biological study area (BSA) was defined within the NES to evaluate potential effects to natural resources from the proposed project. The BSA was defined separately for each segment of the project, due to the differences in the project activities planned for each location. The BSA for location one (PM 16.2-16.5), consisted of the Caltrans right of way (ROW), extending about 30 feet from the highway centerline, on either side of the road. The BSA for location two (PM 18.5-19.5) was defined to be fifteen feet beyond the existing and proposed ROW, including all temporary construction easements, or 50 feet from the edge of the existing pavement, whichever was larger. As work at location one shall be restricted to the existing pavement, all effects discussed throughout the chapter are in regard to location two.

Within the BSA, the potential temporary and permanent impacts to the vegetation community types were examined in order to aid in assessing habitat impacts to special status animal species. Tables 5 and 6 list the temporary and permanent acreage impacts, as well as the habitat communities studied.

Table 5 - Habitat Impacts for Option A

Vegetation Communities	Permanent Impact Acreage	Temporary Impact Acreage	Total BSA Acreage
Blue gum eucalyptus	.778	.037	.815
California annual grassland	2.357	.630	2.986
Seasonal pond wetland	0	.044	.044
Riverine	.001	.091	.092
Mixed willow riparian forest	.477	0	.477
Remnant mixed oak woodland	.409	.045	.455
Urban	.572	.127	.699
Ruderal-agricultural	1.44	.051	1.491
Total	6.033	1.024	7.057

Table 6 - Habitat Impacts for Option B

Vegetation Communities	Permanent Impact Acreage	Temporary Impact Acreage	Total BSA Acreage
Blue gum eucalyptus	.20	.96	1.16
California annual grassland	.69	2.56	3.25
Seasonal pond wetland	0	0	0
Riverine	.01	.02	.03
Mixed willow riparian forest	.68	0	.68
Remnant mixed oak woodland	.45	.23	.68
Urban	.13	.53	.66
Ruderal-agricultural	.44	2.31	2.75
Total	2.60	6.61	9.21

The following special status animal species listed below have the potential to occur within the BSA.

State Species of Special Concern:

- Pallid Bat
- American Badger
- Tri-colored blackbird
- Horned Lark
- Prairie falcon
- Golden eagle
- Burrowing Owl

- Western Pond Turtle
- Coast Horned Lizard
- While-tailed Kite

Of these species, the American badger, coast horned lizard, white tailed kite, horned lark prarie falcon, tri-colored blackbird, and golden eagle have had no reported occurrences within five miles of the BSA, according to a review of the California Natural Diversity Database. It is for this reason that these species will not be discussed for the remainder of this section.

2.2.6.3 Environmental Consequences

The estimated impacts to the vegetation communities listed in tables 4 and 5 were used to assess the potential impacts to special-status species and their habitats. The following species have the potential to use habitat in the project area, and possible species effects are listed below.

Pallid Bat

The pallid bat roosts in structures that are largely absent from the project area (i.e. caves, mines, and old decaying trees). The decaying and large trees in the blue gum eucalyptus community located within the BSA may provide some marginal roosting habitat. No permanent impacts to the pallid bat are anticipated, and it is anticipated that any potential temporary or indirect impacts from the project to the pallid bat can be avoided and/or minimized by implementing the minimization measures discussed in the next section.

Burrowing Owl

The project will disturb and remove some California annual grassland, and while the area is currently disturbed, there is knowledge of some small mammal population's presence in the area. This area is potential burrowing owl habitat. The burrowing owl may lose breeding and foraging habitat as a result of the project. Individual birds could be directly or indirectly harmed during construction. It is anticipated that with the implementation of the avoidance and minimization measures listed in the next section, all potential impacts to the burrowing owl will be rendered minimal.

Western Pond Turtle

Suitable aquatic and nesting habitat for the western pond turtle occurs only in within project segment one. As construction within this segment is limited to paved areas only it is highly unlikely that the western pond turtle's habitat will be impacted by this project. All potential impacts to the western pond turtle would be minimal, as long as the implementation of the avoidance and minimization measures listed in the next section are incorporated.

2.2.6.4 Avoidance, Minimization, and/or Mitigation Measures

Animal species listed as Endangered, or as species of special concern may be indirectly affected by the project. The Department will determining which species may be indirectly affected. The Streambed Alteration Notification package that will be submitted to the

California Department of Fish and Game will address any indirect effects to endangered and special concern species.

Early coordination with design engineers has resulted in design modifications to the project that ensure minimal project impact wherever possible. The following is a summary of measures that will be implemented during construction to reduce adverse environmental impacts. These measures are fully described in the Natural Environment Study. All preventative measures will be devised and monitored by a qualified biologist.

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about the pallid bat, burrowing owl, and migratory birds. It will include information regarding sensitive resources that may exist in the BSA, field identification and habitat requirements, and their legal status and protection under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the pallid bat, burrowing owl, western pond turtle, and migratory birds.

- Procedures – Procedures are detailed in the NES regarding roost removal sites for the pallid bat, discovery of an occupied burrow, and or relocation of the burrowing owl, and for discovering a migratory bird's active nest.

- Compensatory mitigation – If any, for burrowing owls that may be impacted by the project, will be determined during formal consultation with the California Department of Fish and Game.

2.2.7 THREATENED AND ENDANGERED SPECIES

2.2.7.1 Regulatory Setting

The primary state law protecting threatened and endangered species is the California Endangered Species Act (CESA), California Fish and Game Code, Section 2050, et seq. CESA emphasizes early consultation to avoid potential impacts to rare, endangered, and threatened species and to develop appropriate planning to offset project caused losses of listed species populations and their essential habitats. The California Department of Fish and Game (CDFG) is the agency responsible for implementing CESA. Section 2081 of the Fish and Game Code prohibits "take" of any species determined to be an endangered species or a threatened species. Take is defined in Section 86 of the Fish and Game Code as "hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill." CESA allows for take incidental to otherwise lawful development projects; for these actions an incidental take permit is issued by CDFG. For projects requiring a Biological Opinion under Section 7 of the Federal Endangered Species Act, CDFG may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

2.2.7.2 Affected Environment

A Natural Environment Study (NES) was completed for this project in October of 2008. A biological study area (BSA) was defined within the NES to evaluate potential effects to natural resources from the proposed project. The BSA was defined separately for each segment of the project, due to the differences in the project activities planned for each

location. The BSA for location one (PM 16.2-16.5), consisted of the Caltrans right of way (ROW), extending about 30 feet from the highway centerline, on either side of the road. The BSA for location two (PM 18.5-19.5) was defined to be fifteen feet beyond the existing and proposed ROW, including all temporary construction easements, or 50 feet from the edge of the existing pavement, whichever was larger. As work at location one shall be restricted to the existing pavement, all effects discussed throughout the chapter are in regard location two.

Endangered species consultation with the USFWS is necessary when a project has the potential to affect a federally listed species and/or destroy or adversely modify designated critical habitat. The proposed project has the potential to affect four federally listed species: the California red legged frog, the California tiger salamander, the San Joaquin kit fox, and the least Bell's vireo. There is potential to affect designated critical California tiger salamander habitat and proposed California red legged frog habitat. The Department, as assigned by the FHWA, is required to initiate formal consultations with the USFWS. To date, only informal consultation has occurred between Caltrans and the USFWS. The Department will submit a Biological Assessment (BA) to the USFWS, thereby initiating formal section 7 Consultation regarding potential adverse effects to these federally listed species.

Endangered species consultation with the CDFG is necessary when a project may result in the take of a state-listed species. The proposed project has the potential to affect the San Joaquin kit fox, and the least Bell's vireo, species listed as endangered by both state and federal agencies. The proposed project also has the potential to affect the California tiger salamander, a candidate species under CESA. If the Department determines that the proposed project may take any of these species under CESA, then it will seek a consistency determination or an Incidental Take Permit from the CDFG. The Department has made an initial determination that a consistency determination may be needed for the California tiger salamander, if it is listed as an endangered species before the project is complete, but not for the San Joaquin kit fox or the least Bell's vireo.

2.2.7.3 Environmental Consequences

California Tiger Salamander (CTS)

The BSA contains a total of 21.323 acres of CTS critical habitat. This number excludes the developed portion of the BSA (i.e. the paved highway) that does not provide suitable habitat for the species. Of the 21.323 acres of critical habitat, approximately .94 acres will be permanently impacted, and 4.32 acres will be temporarily impacted as a result of the project.

Project Option A will permanently impact approximately 6.033 acres of suitable CTS habitat and temporarily impact approximately 1.024 acres of suitable CTS habitat. Breeding habitat for the CTS will be temporarily impacted, but these impacts will occur outside of the breeding season. A 3 ft. by 4 ft. cement box culvert currently opens on the upstream end next to the CTS breeding pond and provides passage under SR 152 that juvenile CTS could travel through. This culvert will remain intact.

Project Option B will permanently impact approximately 1.91 acres of suitable CTS habitat, and will temporarily impact approximately 6.59 acres of suitable CTS habitat. Under this option no breeding habitat for the CTS will be temporarily impacted. Any potentially indirect temporary impacts to breeding habitat for the CTS will be avoided by following measures set for in section 1.7.7.4

California Red Legged Frog (CRLF)

The proposed project will not have an impact on critical habitat, as defined by the USFWS. However, the USFWS is presently taking action to revise the final critical habitat designation for the CRLF. The proposed designated critical habitats are due for official publication on August 29, 2009. Under the proposed boundaries, 5.337 acres of CRLF habitat occur within the BSA. This number includes the developed portion of the BSA (i.e. the highway). Regardless of which mapping designation is used (the current mapping, or the April 2009 anticipated mapping), the proposed project will impact suitable habitat for the species, and has the potential to result in the take of individual frogs. While some suitable upland habitat will be lost, all impacts to aquatic sites will be temporary in nature. Approximately .26 acres of proposed CRLF critical habitat will be permanently impacted and 1.76 acres will be temporarily impacted. The majority of the permanently impacted area is located within the currently paved portion of the project.

Under current regulations, the project Option A will permanently impact approximately 6.033 acres of suitable CRLF habitat, and temporarily impact 1.024 acres of suitable CRLF habitat. Project Option B will permanently impact 2.60 acres of suitable CRLF habitat, and temporarily impact 6.61 acres of suitable CRLF habitat.

Box culverts currently within the project limits, one at Holstein Creek Bridge, and one just west of the bridge, will allow the frogs to cross under the highway.

Least Bell's Vireo (LBV)

The mixed willow riparian forest along Ortega Creek and the vegetated residential areas, the blue-gum eucalyptus community, and the remnant oak woodland provide variable quality foraging and dispersal habitat for LBV. It is very unlikely that LBV would be present in the project area based upon the historical record of species occurrences in the project vicinity. While no construction will occur within the Ortega Creek channel, fill will be placed on approximately 1000 feet of the upper bank of the creek west of the SR 152-Lovers Lane intersection in order to accommodate shoulder widening. Placement of fill will result in the removal of some of the mixed willow riparian forest that grows along the upper bank. Portions of the other marginally suitable habitats will also be affected by the project. Project Option A will permanently affect approximately 2.236 acres and temporarily affect approximately .209 acres of potential LBV foraging and dispersal habitat. Option B will permanently affect approximately 2.641 acres of potential LBV foraging and dispersal habitat, and will temporarily impact approximately .198 acres of potential LBV foraging and dispersal habitat.

San Joaquin Kit Fox (SJKF)

The California annual grassland and ruderal-agricultural habitats provide potentially suitable foraging and denning habitat for SJKF within the project area. All of the habitat types provide potential dispersal habitat for this species. However, it is unlikely that SJKF currently make regular use of the project area, based upon the historical records for this species in the project vicinity. No dens were observed within the project footprint. If present, individual foxes may be temporarily disturbed by project construction. Option A would result in approximately 6.033 acres of permanent and 1.024 acres of temporary impacts to potential SJKF habitat. Option B would result in approximately 6.516 acres of permanent and .669 acres of potential SJKF habitat.

2.2.7.4 Avoidance, Minimization, and/or Mitigation Measures

The following is a summary of measures that will be implemented to reduce adverse environmental impacts. These are more fully described in the NES. All preventative measures will be devised and monitored by a qualified biologist.

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about the SJKF, LBV, CRLF, and CTS, including information regarding sensitive resources that may exist in the BSA, field identification and habitat requirements, how best to avoid an accidental take of an animal, and legal status and protection of the animals under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the SJKF, LBV, CRLF, and CTS.

- Construction area delineation – Prior to any ground disturbing activities on the project site, the upstream and downstream boundaries of the project area will be delineated with either ESA fencing or solid barriers to prevent workers and equipment from straying from the project area.

- Entrapment avoidance – To prevent entrapment of animals during construction, all excavated, steep walled holes, or trenches more than two feet deep will be covered with plywood or similar materials at the end of each working day. Holes or trenches will have one or more escape ramp constructed of earth fill or wooden planks. All construction pipes, culverts, or similar structures with a diameter of 4 inches of more that are stored on the construction site for more than one night will be securely capped prior to storage, thoroughly inspected for animals before the pipe is buried, capped, or used. Before these holes or trenches are filled, they will be thoroughly inspected for trapped animals. If, at any time a SJKF, or CRLF is trapped and discovered, the USFWS and CDFG will be contacted.

- Vegetation removal – Vegetation required to be removed for the project will be removed prior to April 1.

- Seasonal avoidance – To the extent practicable, construction will not occur during the wet season, when the CRLF and CTS are more likely to disperse through upland habitats. Excepting for limited vegetation clearing that will be performed in the late winter/early spring, work in the terrestrial and riparian portions of the project area will be limited to the period between April 15 – October 15. Any construction that takes place within a wetland, stream, or riparian corridor is limited to the period between June 15 – October 15.

Compensatory mitigation will comply with that required in Biological Opinion 81420-2008-F-1995 issued on March 3, 2010 by the USFWS.

2.3 Cumulative Impacts

2.3.1 REGULATORY SETTING

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines.

The first step in assessing cumulative impacts is to identify the resources to be considered. Various resources may have different degrees of impacts ranging from no impact on a resource, to a significant impact. If a project will not cause direct or indirect impacts on a resource, then there will be no need for further evaluation.

The following resource areas were determined to have no direct or indirect impacts under both Option A and Option B, and were not discussed within chapter two of the document: land use, growth, community character and cohesion, parks and recreation, relocations, environmental justice, utilites/emergency services, traffic and transportation/pedestrian and bicycle facilities, paleontology, hazardous waste/materials, air quality, noise, or natural communities. It is for this reason that these resources are not discussed in this section.

Similarly, the following topics were discussed within chapter two, but as they have no potentially significant direct or indirect impacts on a resource, will not contribute to a cumulative impact on a resource for either Option A or Option B, and need not be further evaluated: farmlands, cultural resources, hydrology/floodplains, water quality/stormwater runoff, geology/soils/seismic/topography, wetlands and other waters, and plant species.

The remaining topics discussed within this document are visual/aesthetics, animal species, and threatened and endangered species. Further analysis was completed to investigate the possibility of cumulative impacts to these resources. Over the last few decades, substantial growth has occurred in southern Santa Clara county and San Benito county. A survey was completed on CEQAnet, the online searchable environmental database of the State Clearinghouse, for any projects listed from 2001-present in areas near or adjacent to the proposed project vicinity. These include areas in unincorporated Santa Clara County and unincorporated San Benito County within 10 square miles of the project, the city of Gilroy, and the city of Hollister. In 2001 an Initial Study/Negative Declaration (CEQA) / Environmental Assessment/Finding of No Significant Impact (NEPA) was completed by the Department and the Federal Highway Administration (FHWA) for a Safety Improvements

Project on State Route 152 in Santa Clara County. This document included the entire project area, and thus would require the same cumulative impact study areas as the project proposed in this document. As no cumulative impacts were found in the 2001 document, it was assumed that the time frame for this project survey need only go back to 2001.

Table 7 lists the projects occurring within the area surveyed, if they are planned, in construction, or already constructed, and if their individual documents indicate they may have impacts to the resources listed above.

Table 7 –Cumulative Impact Status and Impact Summary

Status				**Impacts**			
Project Title	**Constructed**	**In Construction**	**Planned**	**Visual**	**Animal Species**	**Threatened and Endangered Species**	
Casa de Fruta Billboard Visibility Enhancement Project			**X**				
State Route 152/156 Improvement Project			**X**	**X**	**X**	**X**	
Two Lot Subdivision at Route 152/Canada Road			**X**	**X**			
Projects Covered under Safety Improvements Project on State Route 152 IS/ND EA/FONSI							
State Route 152/Prunedale Avenue Left Turn Pocket				**X**			**X**
Truck Climbing Lane	**X**				**X**		**X**
San Felipe Left Turn Pocket				**X**			**X**
Passing Lanes from Old Bloomfield Road to Old Lake Road				***X***			**X**

While many of these projects may impact visual resources, animal species, and threatened and endangered species in some manner, there is mitigation provided for these potential impacts. Thus, it is reasoned that this project will not contribute to any cumulative impacts, as these projects do not have significant impacts individually, or cumulatively.

2.4 Climate Change

2.4.1 REGULATORY SETTING

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years. These efforts are primarily concerned with the emissions of GHG related to human activity that include carbon dioxide (CO_2), methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23 (fluoroform), HFC-134a (s, s, s, 2 –tetrafluoroethane), and HFC-152a (difluoroethane).

In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the state level. Assembly Bill 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions. These stricter emissions standards were designed to apply to automobiles and light trucks beginning with the 2009-model year; however, in order to enact the standards California needed a waiver from the U.S. Environmental Protection Agency (EPA). The waiver was denied by EPA in December 2007. See California v. Environmental Protection Agency, 9th Cir. Jul. 25, 2008, No. 08-70011. However, on January 26, 2009, it was announced that EPA will reconsider their decision regarding the denial of California's waiver. On May 18, 2009, President Obama announced the enactment of a 35.5 mpg fuel economy standard for automobiles and light duty trucks which will take effect in 2012. This standard is the same standard that was proposed by California, and so the California waiver request has been shelved.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases. " Executive Order S-20-06 further directs state agencies to begin implementing AB 32, including the recommendations made by the state's Climate Action Team.

With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least 10 percent by 2020.

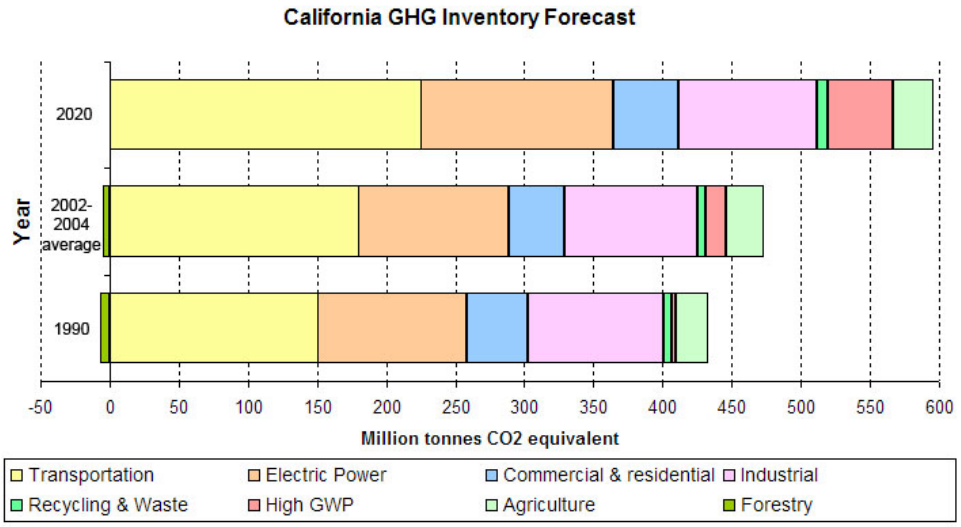
Climate change and GHG reduction is also a concern at the federal level; however, at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. California, in conjunction with several

environmental organizations and several other states, sued to force the U.S. Environmental Protection Agency (EPA) to regulate GHG as a pollutant under the Clean Air Act (Massachusetts vs. Environmental Protection Agency et al., 549 U.S. 497 (2007). The court ruled that GHG does fit within the Clean Air Act's definition of a pollutant, and that the EPA does have the authority to regulate GHG. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

According to Recommendations by the Association of Environmental Professionals on How to Analyze GHG Emissions and Global Climate change in CEQA Documents (March 5, 2007), an individual project does not generate enough GHG emissions to significantly influence global climate change. Rather, global climate change is a cumulative impact. This means that a project may participate in a potential impact through its incremental contribution combined with the contributions of all other sources of GHG. In assessing cumulative impacts, it must be determined if a project's incremental effect is "cumulatively considerable." See CEQA Guidelines sections 15064(i)(1) and 15130. To make this determination the incremental impacts of the project must be compared with the effects of past, current, and probable future projects. To gather sufficient information on a global scale of all past, current, and future projects in order to make this determination is a difficult if not impossible task.

As part of its supporting documentation for the Draft Scoping Plan, CARB recently released an updated version of the GHG inventory for California (June 26, 2008). Shown below is a graph from that update that shows the total GHG emissions for California for 1990, 2002-2004 average, and 2020 projected if no action is taken.

Figure 11 - California GREENHOUSE GAS Inventory
Taken from : http://www.arb.ca.gov/cc/inventory/data/forecast.htm



The Department and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation (see Climate Action Program at Caltrans (December 2006), the Department has created and is implementing the Climate Action Program at the Department that was published in

December 2006. This document can be found at:
http://www.dot.ca.gov/docs/ClimateReport.pdf

2.4.2 PROJECT ANALYSIS

Projects that fall under the categories listed below most likely will have a less than significant or no impact to climate change during operation:

- Pavement rehab
- Shoulder widening
- Culvert/drainage/stormwater work
- Landscaping
- CCTVs, maintenance vehicle pullouts
- Minor curve corrections

Specifically, this project falls under three of the categories listed above: pavement rehabilitation, shoulder widening, and minor curve corrections. As the project is a safety project which will not increase capacity along the highway, and is also exempt from Federal air quality conformity determination requirements, it can be assumed that there will be low to no potential for climate change impacts.

2.4.3 CONSTRUCTION EMISSIONS

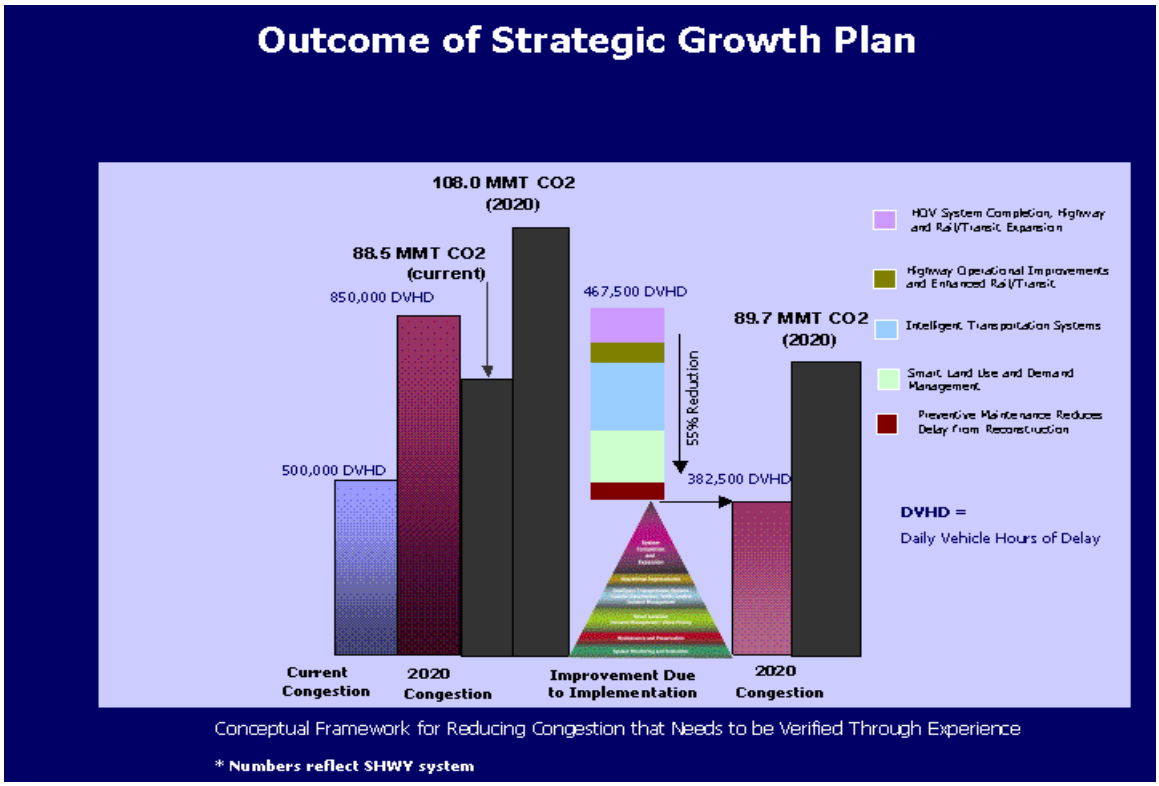
GHG emissions for transportation projects can be divided into those produced during construction and those produced during operations. Construction GHG emissions include emissions produced as a result of material processing, emissions produced by onsite construction equipment, and emissions arising from traffic delays due to construction. These emissions will be produced at different levels throughout the construction phase; their frequency and occurrence can be reduced through innovations in plans and specifications and by implementing better traffic management during construction phases. In addition, with innovations such as longer pavement lives, improved traffic management plans, and changes in materials, the GHG emissions produced during construction can be mitigated to some degree by longer intervals between maintenance and rehabilitation events.

2.4.4 AB 32 COMPLIANCE

The Department continues to be actively involved on the Governor's Climate Action Team as CARB works to implement the Governor's Executive Orders and help achieve the targets set forth in AB 32. Many of the strategies the Department is using to help meet the targets in AB 32 come from the California Strategic Growth Plan, which is updated each year. Governor Arnold Schwarzenegger's Strategic Growth Plan calls for a $238.6 billion infrastructure improvement program to fortify the state's transportation system, education, housing, and waterways, including $100.7 billion in transportation funding through 2016.[1] As shown on the figure below, the Strategic Growth Plan targets a significant decrease in traffic congestion below today's level and a corresponding reduction in GHG emissions. The Strategic Growth Plan proposes to do this while accommodating growth in population and the economy. A suite of investment options has been created that combined together yield the promised reduction in congestion. The Strategic Growth Plan relies on a complete systems approach of a variety of strategies: system monitoring and evaluation, maintenance and preservation, smart land use and demand management, and operational improvements.

[1] Governor's Strategic Growth Plan, Fig. 1 (http://gov.ca.gov/pdf/gov/CSGP.pdf)

Figure 12 - Outcome of Strategic Growth Plan



As part of the Climate Action Program at Caltrans (December 2006, http://www.dot.ca.gov/docs/ClimateReport.pdf), The Department is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. The Department is working closely with local jurisdictions on planning activities; however, the Department does not have local land use planning authority. The Department is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks; the Department is doing this by supporting on-going research efforts at universities, by supporting legislative efforts to increase fuel economy, and by its participation on the Climate Action Team. It is important to note, however, that the control of the fuel economy standards is held by EPA and CARB. Lastly, the use of alternative fuels is also being considered; the Department is participating in funding for alternative fuel research at the UC Davis.

Table 8 summarizes the Department and statewide efforts that the Department is implementing in order to reduce GHG emissions. For more detailed information about each strategy, please see Climate Action Program at Caltrans (December 2006); it is available at http://www.dot.ca.gov/docs/ClimateReport.pdf

Table 8 - Climate Change Strategies

Strategy	Program	Partnership		Method/Process	Estimated CO_2 Savings (MMT)	
		Lead	Agency		2010	2020
Smart Land Use	Intergovernmental Review (IGR)	Caltrans	Local Governments	Review and seek to mitigate development proposals	Not Estimated	Not Estimated
	Planning Grants	Caltrans	Local and regional agencies & other stakeholders	Competitive selection process	Not Estimated	Not Estimated
	Regional Plans and Blueprint Planning	Regional Agencies	Caltrans	Regional plans and application process	0.975	7.8
Operational Improvements & Intelligent Trans. System (ITS) Deployment	Strategic Growth Plan	Caltrans	Regions	State ITS; Congestion Management Plan	.007	2.17
Mainstream Energy & GHG into Plans and Projects	Office of Policy Analysis & Research; Division of Environmental Analysis	Interdepartmental effort		Policy establishment, guidelines, technical assistance	Not Estimated	Not Estimated
Educational & Information Program	Office of Policy Analysis & Research	Interdepartmental, CalEPA, CARB, CEC		Analytical report, data collection, publication, workshops, outreach	Not Estimated	Not Estimated
Fleet Greening & Fuel Diversification	Division of Equipment	Department of General Services		Fleet Replacement B20 B100	0.0045	0.0065 0.45 .0225
Non-vehicular Conservation Measures	Energy Conservation Program	Green Action Team		Energy Conservation Opportunities	0.117	.34
Portland Cement	Office of Rigid Pavement	Cement and Construction Industries		2.5 % limestone cement mix 25% fly ash cement mix > 50% fly ash/slag mix	1.2 .36	3.6
Goods Movement	Office of Goods Movement	Cal EPA, CARB, BT&H, MPOs		Goods Movement Action Plan	Not Estimated	Not Estimated
Total					2.72	18.67

Chapter 3 - Comments and Coordination

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. This chapter summarizes the results of the Department's efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

Locations for Viewing the Environmental Document

This environmental document is available for public viewing at the following locations.

Caltrans 111 Grand Ave, 14th Floor Oakland, CA 94623 (510) 286-6203	Gilroy City Hall, Planning Division 7351 Rosanna Street Gilroy, CA 95020 (408) 846-0400	Gilroy Public Library 7652 Monterey St. Gilroy, CA 95020 (408) 842-8207

An electronic version is available at the following web address:

www.dot.ca.gov/dist4/envdocs.htm

Public Meeting

An open house was held for the public to review the proposed project set forth in the draft environmental document on February 17, 2009, from 4-8 pm, at the Gilroy City Hall, 7351 Rosanna Street, Gilroy, CA 95020.

Organizations and Individuals Contacted

A list of organizations and individuals receiving a copy of the draft document can be found in Chapter 5.

Consultation and Coordination with Public Agencies

In late October of 2008, the Santa Clara County office of Planning was contacted for information regarding Williamson Act contracts on parcels that may be affected by the project.

In October of 2006, the Native American Heritage Commission (Commission) was contacted by the Department, who requested a check of their Sacred Lands files, and to request a list of Native American contacts for the project area. The Commission responded that their records do not indicate the absence of cultural resources in the project area, and supplied a list of Native American contacts for the project area. In May of 2007, all parties listed on the Native American contact list were contacted. Of these only Ms. Sayers, Chairperson of the Indian Canyon Mutsun Band of Costanoan responded requesting more information on the project. The Department met with Ms. Sayers in June of 2007, and followed up with a letter later that month providing her with copies of the Departments previous reports from the area.

The California Department of Fish and Game will be contacted during the design process for a 1602 Lake or Streambed Alteration Agreement. This permit will be applied for during the design phase of the project, which is scheduled to begin after March of 2010.

The Department sent the United States Army Corps of Engineers (USACE) the jurisdictional delineation report for this project on November 20 2008, requesting concurrence with the Department's conclusions. Receipt of concurrence is anticipated to arrive during the design phase of the project, after March 2010. A non-reporting section 404 permit will be applied for during the design phase.

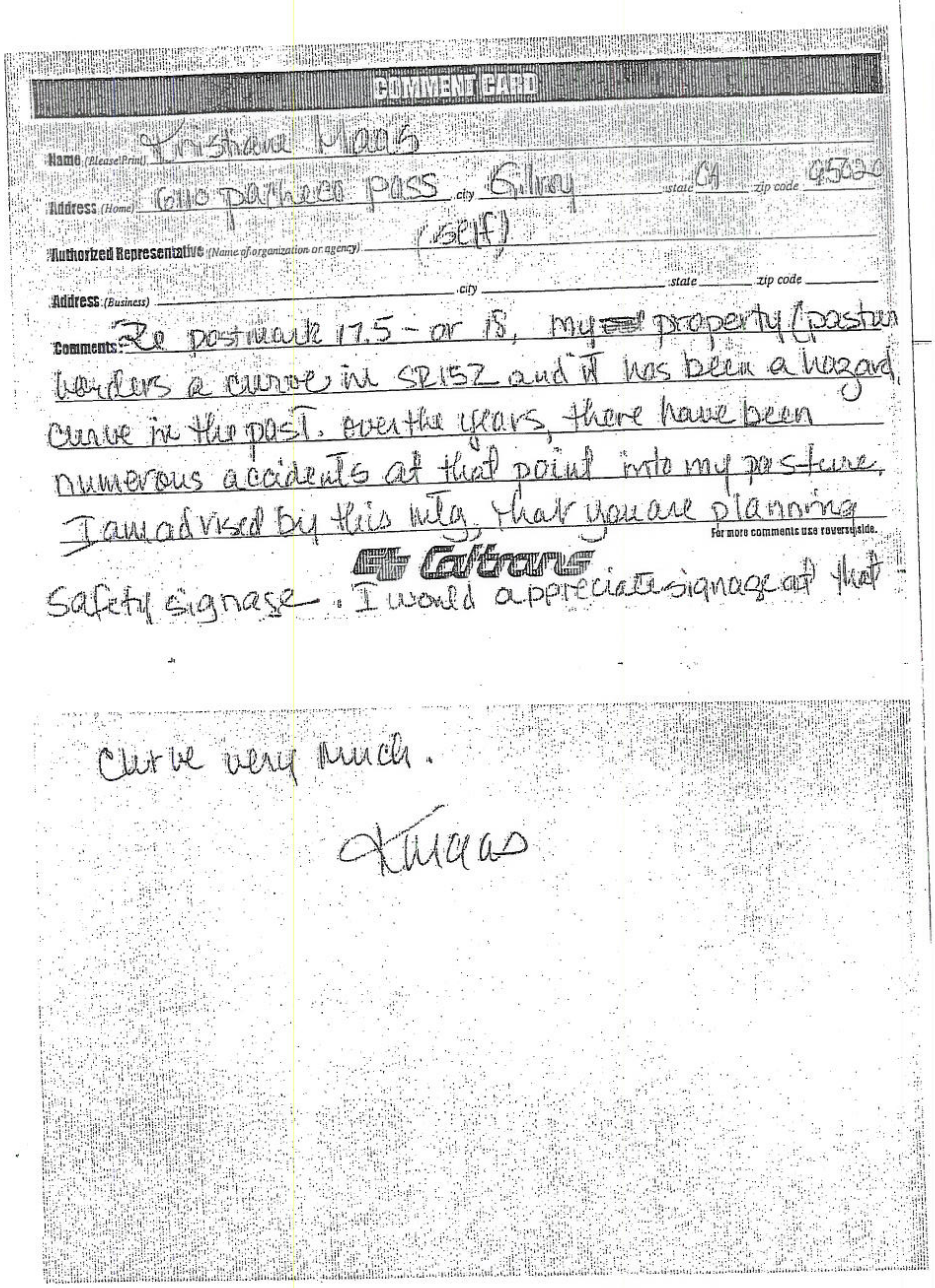
The Department submitted a Biological Assessment (BA) to the United States Fish and Wildlife Service (USFWS) on February 27, 2009. On April 24, 2009 an updated Biological Assessment was submitted to the USFWS. While informal consultation between the Department and the USFWS occurred throughout the project planning process, the submittal of the BA marks the beginning of the official consultation process. A Biological Opinion (BO) 81420-2008-F-1995 was received from the USFWS on March 3, 2010.

Responses to Comments

The Initial Study with Proposed Mitigated Negative Declaration was circulated for public comment from January 29, 2009 to March 2, 2009. A public information meeting was held on February 17, 2009, at the Gilroy City Hall. Notices regarding the availability of the document and the public information meeting were published in the Gilroy Dispatch on January 30, 2009 and February 10, 2009.

A total of five comments were received, submitted by letter, e-mail, or information meeting comment card. A copy of each comment received followed by the Departments response can be found on the following pages. If multiple comments were received in a single submittal, each comment was segregated and addressed separately.

Comment 1



COMMENT CARD

Name (Please Print) Yashawa Mabs

Address (Home) 6110 Pacheco pass city Gilroy state CA zip code 95020

Authorized Representative (Name of organization or agency) (SELF)

Address (Business) city state zip code

Comments: Re postmark 17.5 - or 18, my property (pasture) borders a curve in SR152 and it has been a hazard curve in the past. over the years, there have been numerous accidents at that point into my pasture. I am advised by this mtg, that you are planning safety signage. I would appreciate signage at that curve very much.

For more comments use reverse side.

Caltrans

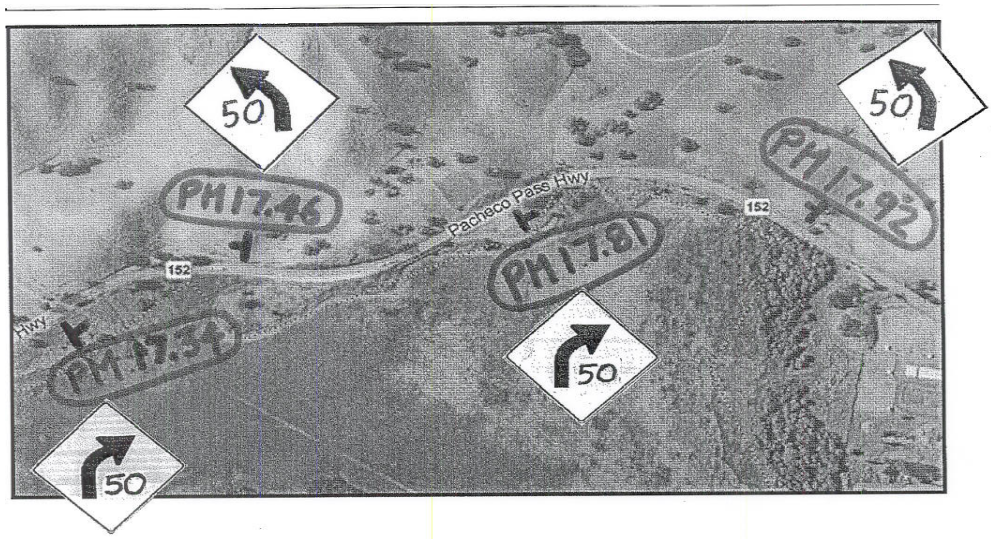
Thanks

Comment 1 (sic):

Re postmile 17.5- or 18, my property pasture borders a curve in SR 152 and it has been a hazard curve in the past. Over the years there have been numerous accidents at that point in my pasture. I am advised by this mtg. that you are planning safety signage. I would appreciate signage at that curve very much.

Response 1:

While the curve referenced falls within the limits of the project area, it does not fall within the locations where improvements are being constructed. In order to improve safety along this portion of the road as quickly as possible, as the accident rate along this portion of 152 is higher than the statewide average, the Department's maintenance division currently has a project to install speed reduction signs in this area. The signs are scheduled to be installed by May of 2010. The graphic below shows the approximate locations where the signs will be placed.



Comment 2

"Melissa Escaron"
<MESCARON@dfg.ca.gov>
02/19/2009 03:46 PM

To <jared_goldfine@dot.ca.gov>
cc "Diane Harais" <DHARAIS@dfg.ca.gov>, "Melissa Escaron" <MESCARON@dfg.ca.gov>
Subject Comments for Lover's Lane IS/Proposed MND, CEQA 2009-0075

Hello Jared. I just reviewed the IS/Proposed MND for the Lover's Lane Safety Improvement Project. I noticed in the Biological section 2.2.7.2 it states that Caltrans does not expect to need a Consistency Determination for this project. However, the Proposed Mitigated Negative Declaration states that there may be trapping of San Joaquin kit fox- trapping would require a Consistency Determination.

Also the California Tiger Salamander was declared a candidate species for listing as endangered under CESA on February 10, 2009. A Consistency Determination may be needed for CTS for this project, and the associated compensatory mitigation mentioned in the Proposed Mitigated Negative Declaration, would need to be determined in consultation with DFG and USFWS.

Additionally, DFG recommends that oak trees located in uplands be replaced by at least a 5:1 ratio. DFG recommends that native trees that are located within the riparian zone be replaced at a minimum of a 3:1 ratio, and oaks at a 5:1 ratio- riparian mitigation needs would be addressed through the Streambed Alteration Agreement process.

Melissa Escaron
Staff Environmental Scientist
California Department of Fish and Game
Cell: 707.339.0334
mescaron@dfg.ca.gov

Comment 2A:

I just reviewed the IS/Proposed MND for the Lover's Lane Safety Improvement Project. I noticed in the Biological section 2.2.7.2 it states that Caltrans does not expect to need a Consistency Determination for this project. However, the Proposed Mitigated Negative Declaration states that there may be trapping of San Joaquin kit fox – trapping would require a Consistency Determination.

Response 2A

Since the release of the Initial Study in January, the Department has chosen Build Alternative Option B as the preferred alternative. By refining project plans, and reducing slope ratios along portions of the project, the project footprint for Option B has shrunk considerably. Thus it has been concluded that the now reduced construction activities in the project footprint for Option B will not substantially reduce the quality or availability of land within the BSA for dispersing San Joaquin kit fox. Historical records indicate the absence of this species in the project area; subsequently, it is extremely unlikely that the San Joaquin kit fox will be present in the project area during construction. In addition, the Department has determined that the project is not likely to adversely affect the San Joaquin kit fox. As the Department does not anticipate take in any form of the San Joaquin kit fox, as defined by the CDFG, a consistency determination from the CDFG is not required. In addition to the proposed avoidance and minimization measures, including those for entrapment, will further prevent take in the unlikely event that a San Joaquin kit fox is present on the project site during construction. If at any time the project changes in such a way that the Department believes it may result in any form of take of the San Joaquin kit fox, both the CDFG and USFWS will be notified immediately.

Comment 2B
Also the California tiger salamander was declared a candidate species for listing as endangered under CESA on February 10, 2009. A Consistency Determination may be needed for CTS for this project, and the associated compensatory mitigation mentioned in the Proposed Mitigated Negative Declaration, would need to be determined in consultation with CDFG and USFWS.

Response 2B
The Initial Study for this project was completed in January of 2009, prior to the listing of the California tiger salamander as a candidate species under CESA, in February of 2009. The Department concurs that a consistency determination for the CTS could be required, pending regulatory guidance from the CDFG. The Department anticipates that a take of the CTS may occur as a result of the project, and is requesting guidance from the CDFG on how to proceed with this candidate species.

Comment 2C
Additionally, DFG recommends that oak trees located in uplands be replaced by at least a 5:1 ration. CDFG recommends that native trees that are located within the riparian zone be replaced at a minimum of a 3:1 ratio, and the oaks at a 5:1 ratio – riparian mitigation needs would be addressed through the Streambed Alteration Agreement process.

Response 2C
The Department will provide the requested 5:1 mitigation ratio for oak trees, and 3:1 mitigation ratio for native riparian trees having a dbh greater than six inches that are removed to construct the project.

Comment 3

California Regional Water Quality Control Board
Central Coast Region

Linda S. Adams
Secretary for
Environmental Protection

Internet Address: http://www.swrcb.ca.gov/rwqcb3
895 Aerovista Place, Suite 101, San Luis Obispo, California 93401
Phone (805) 549-3147 • FAX (805) 543-0397

Arnold Schwarzenegger
Governor

February 25, 2009

Jared Goldfine
Senior Environmental Planner
California Department of Transportation
Environmental Planning MS 8B
P.O. Box 23660
Oakland, CA 94623

Dear Mr. Goldfine:

INITIAL STUDY WITH PROPOSED MITIGATED NEGATIVE DECLARATION FOR LOVERS LANE SAFETY IMPROVEMENTS PROJECT, STATE ROUTE 152, SAN BENITO COUNTY, SCH #2009012085

Thank you for the opportunity to comment on the above-referenced project. We understand that this project involves safety improvements to two sections of State Route 152 east of Gilroy between Old Lake Road and San Felipe Road. One section will be widened and realigned, and both sections will be resurfaced. In addition, one of the project alternatives includes widening the bridge over Holstein Creek.

As you are aware, the Central Coast Regional Water Quality Control Board (Water Board) is a responsible agency charged with the protection of Waters of the State of California in the Central Coast Region. Waters of the State include surface waters, ground waters, and wetlands. The Water Board is responsible for administering regulations established by the Federal Clean Water Act and the California Water Code. These regulations cover discharges to surface water and groundwater, as well as discharges to land that may affect ground water. The Water Board also administers regulations established by the Central Coast Region Water Quality Control Plan.

The primary focus of the Water Board is the protection of water resources and beneficial uses of these resources. This project should promote these values as a fundamental priority while improving the safety of drivers and passengers using SR 152. However, all improvements must be conducted in a way which protects the quality and beneficial uses of California's water resources. The California Environmental Quality Act document describes several measures that will mitigate for potential environmental impacts of the project. In addition to these mitigation measures, we offer the following comments for your review.

Comments

1. Preferred Alternative

   Water Board staff recommends the selection of Option B in order to provide the greatest degree of protection for the water quality and riparian habitat of Holstein and Ortega Creeks and their associated wetlands.

2. Revegetation

   We affirm your commitment to replace oak trees larger than six inches diameter at a 3:1 ratio. However, Water Board staff also notes that Ortega and Holstein Creeks are almost entirely exposed along their length throughout the project area. Shade trees serve a vital function in protecting water quality and beneficial uses by cooling the water, stabilizing the banks, and providing habitat. Therefore we recommend the following actions.

   - Avoid removing trees as much as possible.
   - The California Black Walnut tree is a native riparian species. Therefore, please replace California Black Walnut trees larger than six inches diameter at a 2:1 ratio.
   - Replace non-native species with native riparian species such as Sycamore trees, and plant them where they can provide shade for Ortega and Holstein Creeks.

Thank you again for the opportunity to review the Initial Study for this project. If you have any questions about these comments, please call **Jon Rohrbough** at (805) 549-3458 or at jrohrbough@waterboards.ca.gov, or Matt Thompson at (805) 549-3159.

Sincerely,

MThompson

for Roger W. Briggs
Executive Officer

S:\CEQA\Comment Letters\San Benito County\SR 152-Lovers Lane IS MNG--SCH#2009012085.doc

Comment 3A
Preferred Alternative – Water Board staff recommends the selection of Option B in order to provide the greatest degree of protection for the water quality and riparian habitat of Holstein and Ortega Creeks and their associated wetlands.

Response 3A
The Department appreciates you input into the alternative selection process. The Department has selected Build Alternative Option B as the preferred alternative.

Comment 3B
Revegetation – We affirm your commitment to replace oak trees larger than six inches diameter at a 3:1 ratio. However, Water Board staff also notes that Ortega and Holstein Creeks are almost entirely exposed along their length throughout the project area. Shade trees serve a vital function in protecting water quality and beneficial uses by cooling the water, stabilizing the banks, and providing habitat. Therefore we recommend the following actions:

- Avoid removing trees as much as possible
- The California Black Walnut tree is a native riparian species. Therefore please replace California Black Walnut trees larger than six inches diameter at a 2:1 ratio
- Replace non-native species with native riparian species such as Sycamore trees, and plant them where they can provide shade for Ortega and Holstein Creeks

Response 3B
The Department is committed to avoiding tree removal whenever possible. Thus far, throughout the design process, the project footprint has been reduced to avoid impacts to trees and other sensitive environmental resources. The Department will take measures to minimize tree removal, such as trimming trees instead of removing them, when possible.

Since the release of the Initial Study in January, the Department has chosen Build Alternative Option B as the preferred alternative. By refining project plans, and reducing slope ratios along portions of the project, the project footprint for Option B has shrunk considerably. Whereas the data in the Initial Study distributed in January indicated that a total of five California black walnut trees with a dbh greater than 6 inches would be removed, the revised project design will only require the removal of a single California black walnut tree with a dbh in excess of 6 inches. The California black walnut tree slated for removal is not located along the riparian corridor of Ortega Creek. The Department plans to replace the tree at a 3:1 ratio, per a request made by the CDFG.

The Department is not able to replace trees in areas that will provide shade to Ortega and Holstein Creek, as these areas located adjacent to the creeks are either within the clear recovery zone (an area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear recovery of 20 feet on conventional highways), or not owned by the Department. Non-native trees that are removed will be replaced with native tree species at an offsite location. The Department anticipates that the existing shade along both creeks will be maintained. Holstein Creek currently contains relatively little shade, and no tree removal is anticipated adjacent to it. The portion of Ortega Creek that parallels State Route 152 (between postmile 18.75 and 19.0) is currently well shaded.

Comment 4

Santa Clara Valley Water District SM

5750 ALMADEN EXPWY
SAN JOSE, CA 95118-3686
TELEPHONE (408) 265-2600
FACSIMILE (408) 266-0271
www.valleywater.org
AN EQUAL OPPORTUNITY EMPLOYER

File: 23017
Santa Clara Conduit

March 6, 2009

Mr. Jared Goldfine
Senior Environmental Planner
Department of Transportation, Environmental Planning MS 8B
P.O. Box 23660
Oakland, CA 94623

Subject: Lovers Lane Safety Improvement Project

Dear Mr. Goldfine:

The Santa Clara Valley Water District (District) has reviewed the Notice of Intent to adopt a Mitigated Negative Declaration for the subject project, received on February 4, 2009.

The proposed project will not result in the modification of any District facilities. The project appears to adequately address flooding and water quality concerns.

We appreciate the opportunity to comment on this document. If you have any questions, please contact me at (408) 265-2607, extension 2319.

Sincerely,

for Sue Tippets

Yvonne Arroyo
Associate Engineer
Community Projects Review Unit

cc: S. Tippets, L. Lee, M. Martin, File

23017_51688ya03-06

Comment 4
The Santa Clara Valley Water District (District) has reviewed the Notice of Intent to adopt a Mitigated Negative Declaration for the subject project, received on February 4, 2009. The proposed project will not result in the modification of any District facilities. The project appears to adequately address flooding and water quality concerns.

Response 4
The Department appreciates the District's review of the Notice of Intent to Adopt a Mitigated Negative Declaration.

Comment 5

Van Nguyen
<nvan66@yahoo.com>
03/15/2009 10:37 PM

To Jared_Goldfine@dot.ca.gov
cc
Subject Lovers Lane Safety Improvement Project

Dear Jared Goldfine.
Van Nguyen
5155 Pacheco pass hwy
Hollister, ca 95023
Subject: Lover lane safety improvement project.
On Figure 9,- viewpoint 3 existing
There is a stand of eucalyptus trees along the south side of the hightway, need to be removed along with the additional tree farther ahead. There are a large eucalyptus trees on my property, I do not know which ones, or you want to removed them all, and what kind the trees do you want to replace.
If you have time, Please sent some one to my property explain what you want to do with the trees.
We are sorry with the trees have been removed, good view, good shadow front of my house.
Thank you
Van Nguyen

Comment 5 (sic)

On Figure 9,- viewpoint 3 existing
There is a stand of eucalyptus trees along the south side of the hightway (sic), need to be removed along with the additional tree farther ahead. There are a large eucalyptus trees on my property, I do not know which ones, or you want to removed them all, and what kind the trees do you want to replace.
If you have time, Please sent some one to my property explain what you want to do with the trees.
We are sorry with the trees have been removed, good view, good shadow front of my house.

Response 5

Throughout the proposed project, the Department is making every effort possible to avoid impacting trees, wildlife and habitat. Unfortunately, as the trees you are referring to are within the clear recovery zone (an area clear of fixed objects adjacent to the roadway to provide a recovery zone for vehicles that have left the traveled way. A minimum clear recovery of 20 feet on a conventional highway, which this portion of SR152 is, is needed) the Department must remove them. It is for this reason that replacement planting of these trees is not possible at this location. The Department understands your concern regarding the removal of these trees. Your comment has been provided to the Project Manager, who will arrange for Department staff to contact you directly regarding your concerns.

Chapter 4– List of Preparers

Caltrans

Office of Environmental Analysis
Jared Goldfine, AICP
Cristin Hallissy
Craig Jung

Office of Natural Sciences and Permits
Margaret Gabil
Alison Graff
Katie Thoreson

Office of Cultural Resources
Elizabeth Krase
Andrew Hope
Stephen Bryne

Office of Landscape Architecture
Bryan Walker
Thomas Packard
Keith Suzuki

Office of Environmental Engineering
Norman Gonsalves
Merlito Coloma
Jiin-Tian Teng

Hydraulics
Fang Hong Wu
Aman Zareai

Office of Geotechnical Design
Mohammad Zabolzadeh
Ali Kaddoura
Christopher Risden

Office of Design SHOPP
Morteza Azimi
Fatemeh Arbabian
Ahmed Rahid

Office of Project Management
Fariba Zohoury

Consultant

URS
Jessi Golding

Chapter 4 – Distribution List

Elected Officials

U.S. Senators

The Honorable Barbara Boxer
U.S. Senate
1700 Montgomery Street, Suite 240
San Francisco, CA 94111

The Honorable Dianne Feinstein
U.S. Senate
One Post Street, Suite 2450
San Francisco, CA 94104

United States House of Representatives

The Honorable Sam Farr
U.S. House of Representatives
District 17
100 West Alisal Street
Salinas, CA 93901

The Honorable Jerry McNerny
U.S. House of Representatives
District 11
5776 Stoneridge Mall Rd. #175
Pleasanton, CA 94588

California State Senate

The Honorable Elaine Alquist
California State Senate, District 13
7800 Arroyo Circle, Suite A
Gilroy, CA 95020

The Honorable Jeff Denham
California State Senate, District 12
369 Main Street, #208
Salinas, CA 93901

California State Assembly

Assembly Member Anna M. Caballero
California State Assembly, District 28
100 West Alisal Street, Suite 134
Salinas, CA 93901

Santa Clara County Board of Supervisors

Mr. Donald F. Gage
District One Supervisor
Santa Clara County
70 West Hedding Street
San Jose, CA 95110

San Benito County Board of Supervisors

Ms. Margie Barrios
District One Supervisor
San Benito County
County Administration Bldg.
481 4th St, 1st Floor
Hollister, CA 95023-3840

City of Gilroy

The Honorable Al Pinheiro
Mayor, City of Gilroy
190 First St.
Gilroy, CA 95020

City of Gilroy City Council
7351 Rosanna St.
Gilroy, CA 95020

Federal Agencies

Regulatory Branch
U.S. Army Corps of Engineers
1455 Market Street, 16th Floor
San Francisco, CA 94103-1398

Regulatory Branch
U.S. EPA Region 9
75 Hawthorne Street
San Francisco, CA 94105

Mike Fris
Assistant Regional Director
Ecological Services
US Fish and Wildlife Service
2800 Cottage Way, W2606
Sacramento, CA 95825

USDA
Natural Resources Conservation Service
Farm Service Agency
Hollister Service Center
2337 Technology Pkwy, Suite A
Hollister, CA 95023-2544

State Agencies

California Transportation Commission
1120 "N" Street, Room 2221 (MS-52)
Sacramento, CA 95814

Regional Manager
California Department of Fish and Game
1416 9th Street
Sacramento, CA 95814

Director
Department of Conservation
801 K Street, MS 24-01
Sacramento, CA 95814

Farmland Mapping and Monitoring Program
Department of Conservation
801 K Street, MS 18-01
Sacramento, CA 95814

California Air Resources Board
PO Box 2815
Sacramento, CA 95812

State Clearinghouse
PO Box 3044
Sacramento, CA 95812-3044

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer
Office of Historic Preservation
Department of Parks and Recreation
PO Box 942896
Sacramento, CA 94296-0001

Lester A Snow
Director, Department of Water Resources
1416 Ninth Street
Sacramento, CA 95814

Paul D. Thayer
Executive Officer
California State Lands Commission
100 Howe Ave, Suite 100 South
Sacramento, CA 95825-8202

California Native American Heritage Commission
915 Capitol Mall, Room 364
Sacramento, CA 95814

Planning and Analysis Division
California Highway Patrol
2555 First Avenue
Sacramento, CA 95818

Melissa Escaron
Staff Environmental Scientist
California Department of Fish and Game
1416 9th Street
Sacramento, CA 95814

Regional and Local Agencies

Mr. Art Henriques
San Benito County
Director of Planning
and Building Inspection Services
3224 Southside Rd.
Hollister, CA 95023-9174

Ms. Jody Hall Esser
Santa Clara County
Director, Department of
Planning and Development
70 West Hedding St.
San Jose, CA 95110

Mr. David Bischoff
City of Gilroy
Planning Division Manager
7351 Rosanna Street
Gilroy, CA 95020

Lani D. Yoshimura
Gilroy Library
Community Librarian
7652 Monterey St.
Gilroy, CA 95020-6193

City of Gilroy City Engineer
7351 Rosanna Street
Gilroy, CA 95020

Association of Bay area Governments
Metro Center
101 Eighth Street
Oakland, CA 94607

Mr. Steve Heminger
Executive Director
Metropolitan Transportation Commission
101 Eighth Street
Oakland, CA 94607

Central Coast RWQCB
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

David Vintze
Air Quality Planning Manager
Bay Area Air Quality Management District
Planning Department
939 Ellis Street
San Francisco, CA 94109

Tom Fitzwater
Environmental Planning Manager
Santa Clara Valley Transit Authority
3331 North First St.
San Jose, CA 95134

Community Projects Review Unit
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614

Gilroy Historical Society
PO Box 1621
Gilroy, CA 95021-1621

Matt Thompson
Central Coast RWQCB
895 Aerovista Place, Suite 101
San Luis Obispo, CA 93401

Yvonne Arroyo, Associate Engineer
Community Projects Review Unit
Santa Clara Valley Water District
5750 Almaden Expressway
San Jose, CA 95118-3614

Individuals

Copies of this document were distributed to all property owners with land adjacent to the project limits.

Appendix A - CEQA Checklist

Supporting documentation of all CEQA checklist determinations is provided in Chapter 2 of this Initial Study/Environmental Assessment. Documentation of "No Impact" determinations is provided at the beginning of Chapter 2. Discussion of all impacts, avoidance, minimization, and/or compensation measures are under the appropriate topic headings in Chapter 2.

This checklist identifies human, physical and biological factors that might be affected by the proposed project. In many cases, background studies performed in connection with the projects indicate no impacts. A NO IMPACT answer in the last column reflects this determination. The words "significant" and "significance" used throughout the following checklist are related to CEQA, not NEPA, impacts.

	Potentially Significant Impact	**Less Than Significant with Mitigation Incorporation**	**Less Than Significant Impact**	**No Impact**
I. AESTHETICS -- Would the project:				
a) Have a substantial adverse effect on a scenic vista?			X	
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?			X	
c) Substantially degrade the existing visual character or quality of the site and its surroundings?		X		
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?			X	
II. AGRICULTURE RESOURCES: In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997) prepared by the California Dept. of Conservation as an optional model to use in assessing impacts on agriculture and farmland. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?			X	
c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?				X
III. AIR QUALITY -- Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?				X
b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?				X
c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?				X
d) Expose sensitive receptors to substantial pollutant concentrations?			X	
e) Create objectionable odors affecting a substantial number of people?			X	
IV. BIOLOGICAL RESOURCES -- Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		X		

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or US Fish and Wildlife Service?			X	
c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?			X	
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			X	
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?			X	
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?				X
V. CULTURAL RESOURCES -- Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource as defined in '15064.5?				X
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to '15064.5?				X
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?				X
d) Disturb any human remains, including those interred outside of formal cemeteries?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
VI. GEOLOGY AND SOILS -- Would the project:				
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				X
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				X
ii) Strong seismic ground shaking?			X	
iii) Seismic-related ground failure, including liquefaction?			X	
iv) Landslides?			X	
b) Result in substantial soil erosion or the loss of topsoil?			X	
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?			X	
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			X	
e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				X
VII. HAZARDS AND HAZARDOUS MATERIALS B Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?			X	
b) Create a significant hazard to the public or the environment through reasonably			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
foreseeable upset and accident conditions involving the release of hazardous materials into the environment?				
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?			X	
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?				X
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				X
f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?				X
g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?				X
h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				X
VIII. HYDROLOGY AND WATER QUALITY -- Would the project:				
a) Violate any water quality standards or waste discharge requirements?				X
b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
(e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?				
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?			X	
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?				X
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?			X	
f) Otherwise substantially degrade water quality?			X	
g) Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?				X
h) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?			X	
i) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam?				X
j) Inundation by seiche, tsunami, or mudflow?				X
IX. LAND USE AND PLANNING - Would the project:				
a) Physically divide an established community?				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?				X
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?				X
X. MINERAL RESOURCES -- Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?				X
b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				X
XI. NOISE B Would the project result in:				
a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?				X
b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?				X
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?				X
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?			X	
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
project expose people residing or working in the project area to excessive noise levels?				
f) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?				X
XII. POPULATION AND HOUSING -- Would the project:				
a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?				X
b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?				X
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?				X
XIII. PUBLIC SERVICES				
a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
Fire protection?				X
Police protection?				X
Schools?				X
Parks?				X
Other public facilities?				X
XIV. RECREATION --				
a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that				X

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
substantial physical deterioration of the facility would occur or be accelerated?				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?				X
XV. TRANSPORTATION/TRAFFIC -- Would the project:				
a) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections)?				X
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?				X
c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				X
d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?				X
e) Result in inadequate emergency access?			X	
f) Result in inadequate parking capacity?				X
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?				X
XVI. UTILITIES AND SERVICE SYSTEMS B Would the project:				
a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?				X
d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?				X
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?				X
f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			X	
g) Comply with federal, state, and local statutes and regulations related to solid waste?			X	
XVII. MANDATORY FINDINGS OF SIGNIFICANCE --				
a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?			X	
b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when			X	

	Potentially Significant Impact	Less Than Significant with Mitigation Incorporation	Less Than Significant Impact	No Impact
viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?				
c) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?			X`	

Appendix B - Title VI Policy Statement

STATE OF CALIFORNIA—BUSINESS, TRANSPORTATION AND HOUSING AGENCY ARNOLD SCHWARZENEGGER, Governor

DEPARTMENT OF TRANSPORTATION
OFFICE OF THE DIRECTOR
1120 N STREET
P. O. BOX 942873
SACRAMENTO, CA 94273-0001
PHONE (916) 654-5266
FAX (916) 654-6608
TTY (916) 653-4086

Flex your power!
Be energy efficient!

August 25, 2009

TITLE VI
POLICY STATEMENT

The California State Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, or age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

Randell H. Iwasaki

RANDELL H. IWASAKI
Director

"Caltrans improves mobility across California"

Appendix C - Minimization and/or Mitigation Summary

Visual/Aesthetics

- To minimize the degree of change and reduce visual impacts, techniques such as contour grading, slope rounding, and revegetation/replanting will be employed on the project site. Cut and fill slops will be contour graded and rounded to reflect the contours of the adjacent undisturbed topography, to the extent feasible.

- To minimize visual impacts resulting from the construction of soil nail retaining walls, a final surface texture and coloration mimicking natural rock would be applied.

- Trees removed during construction of the project will be replaced. All oak trees removed during construction with a diameter at breast height greater than 6 inches will be replaced at a ratio of 5:1. Native riparian trees with a diameter at breast height greater than 6 inches that are removed will be replaced at a ratio of 3:1. All other trees removed with a diameter at breast height greater than 6 inches will be replaced at a ratio of 1:1. Introduced tree species (such as the blue gum eucalyptus) that are removed will be replaced with native tree species appropriate to the area, particularly oaks. All trees will be planted after the completion of the roadway project, and will be planted within the project area whenever possible.

Animal Species

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about species of special concern having the potential to occur inside the project limits , and migratory birds, including information regarding sensitive resources that may exist in the biological study area, field identification and habitat requirements, and their legal status and protection under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the pallid bat, burrowing owl, western pond turtle, and migratory birds.

- Compensatory mitigation – If any, for burrowing owls that may be impacted by the project, will be determined during formal consultation with the California Department of Fish and Game (CDFG).

Threatened and Endangered Species

- Onsite Construction Personnel Education Program - Training will be conducted for all construction crews and contractors, prior to the start of work, and upon the new arrival of any new worker. The training will be conducted to educate workers about the San Joaquin kit fox, Least Bell's vireo, California red legged frog, and the California tiger salamander, including information regarding sensitive resources that may exist in the biological study area, field identification and habitat requirements, how best to avoid an accidental take of an animal, and legal status and protection of the animals under state and federal laws.

- Preconstruction surveys – Preconstruction surveys will be conducted for the San Joaquin kit fox, Least Bell's vireo, California red legged frog, and the California tiger salamander.

- Construction area delineation – Prior to any ground disturbing activities on the project site, the upstream and downstream boundaries of the project area will be delineated with either environmentally sensitive area fencing or solid barriers to prevent workers and equipment from straying from the project area.

- Entrapment avoidance – To prevent entrapment of animals during construction, all excavated, steep walled holes, or trenches more than two feet deep will be covered with plywood or similar materials at the end of each working day. Holes or trenches will have one or more escape ramp constructed of earth fill or wooden planks. All construction pipes, culverts, or similar structures with a diameter of 4 inches of more that are stored on the construction site for more than one night will be securely capped prior to storage, thoroughly inspected for animals before the pipe is buried, capped, or used. Before these holes or trenches are filled, they will be thoroughly inspected for trapped animals. If, at any time a San Joaquin kit fox, or California red legged frog is trapped and discovered, the United States Fish and Wildlife Service (USFWS) and the California Department of Fish and Game (CDFG) will be contacted.

- Vegetation removal – Vegetation required to be removed for the project will be removed between August 15 and October 15.

- Seasonal avoidance – To the extent practicable, construction will not occur during the wet season, when the California red legged frog and the California tiger salamander are more likely to disperse through upland habitats. Excepting for limited vegetation clearing that will be performed in the late winter/early spring, work in the terrestrial and riparian portions of the project area will be limited to the period between April 15 – October 15. Any construction that takes place within a wetland, stream, or riparian corridor is limited to the period between June 15 – October 15.

- Compensatory mitigation for any threatened and endangered species that may be impacted by the project will comply with Biological Opinion 81420-2008-F-1995 from the US Fish and Wildlife Service.

Appendix D - List of Acronyms

AADT – average annual daily traffic

AB 32 – Assembly Bill 32

USACE – United States Army Corps of Engineers

APE – Area of Potential Effects

ARB – Air Resources Board

ASR – Archaeological Survey Report

BA – Biological Assessment

BO – Biological Opinion

BMPs – Best Management Practices

BSA – Biological Study Area

CDFG – California Department of Fish and Game.

CEQA – California Environmental Quality Act

CESA – California Endangered Species Act

CPRC – California Public Resources Code

CRLF – California red-legged frog

CTS – California tiger salamander

CWA – Clean Water Act

dbh – diameter at breast height (approx. 4.5 ft)

Department – California Department of Transportation

EPA – Environmental Protection Agency

ESA – Environmentally Sensitive Area

FEMA – Federal Emergency Management Agency

FESA – Federal Endangered Species Act

FHWA – Federal Highway Administration

GHG – greenhouse gas

HPSR – Historic Property Survey Report

HRER – Historic Resources Evaluation Report

IPCC - Intergovernmental Panel on Climate Change

LBV – least Bell's vireo

LOS – Level Of Service

MCE – Maximum Credible Earthquake

MEP – maximum extent practicable

MLD – Most Likely Descendent

MND – Mitigated Negative Declaration

NAHC – Native American Heritage Commission

NES – Natural Environment Study

NHPA – National Historic Preservation Act

NPDES – National Pollutant Discharge Elimination System

PA – Section 106 Programmatic Agreement

ROW – Right of Way

RWQCB – Regional Water Quality Control Board

SHPO – State Historic Preservation Officer

SJKF – San Joaquin kit fox

SQPPP – Storm Water Pollution Prevention Program

SWRCB – State Water Resources Control Board

TASAS – Traffic Accident Surveillance and Analysis System

USC – United States Code

USFWS – United States Fish and Wildlife Service

VIA - Visual Impact Assessment

Appendix E - List of Technical Studies

Archaeological Survey Report – July 2008

Geotechnical Report – December 2008

Historic Property Survey Report – July 2008

Historical Resources Evaluation Report – July 2008

Jurisdictional Delineation Report – October 2008

Location Hydraulic Study Report – December 2008

Natural Environment Study – October 2008

Storm Water Data Report – January 2009

Visual Impact Assessment – December 2008

Water Quality Report – April 2008

Appendix F - FEMA Flood Maps

Figure C-1, Appendix C

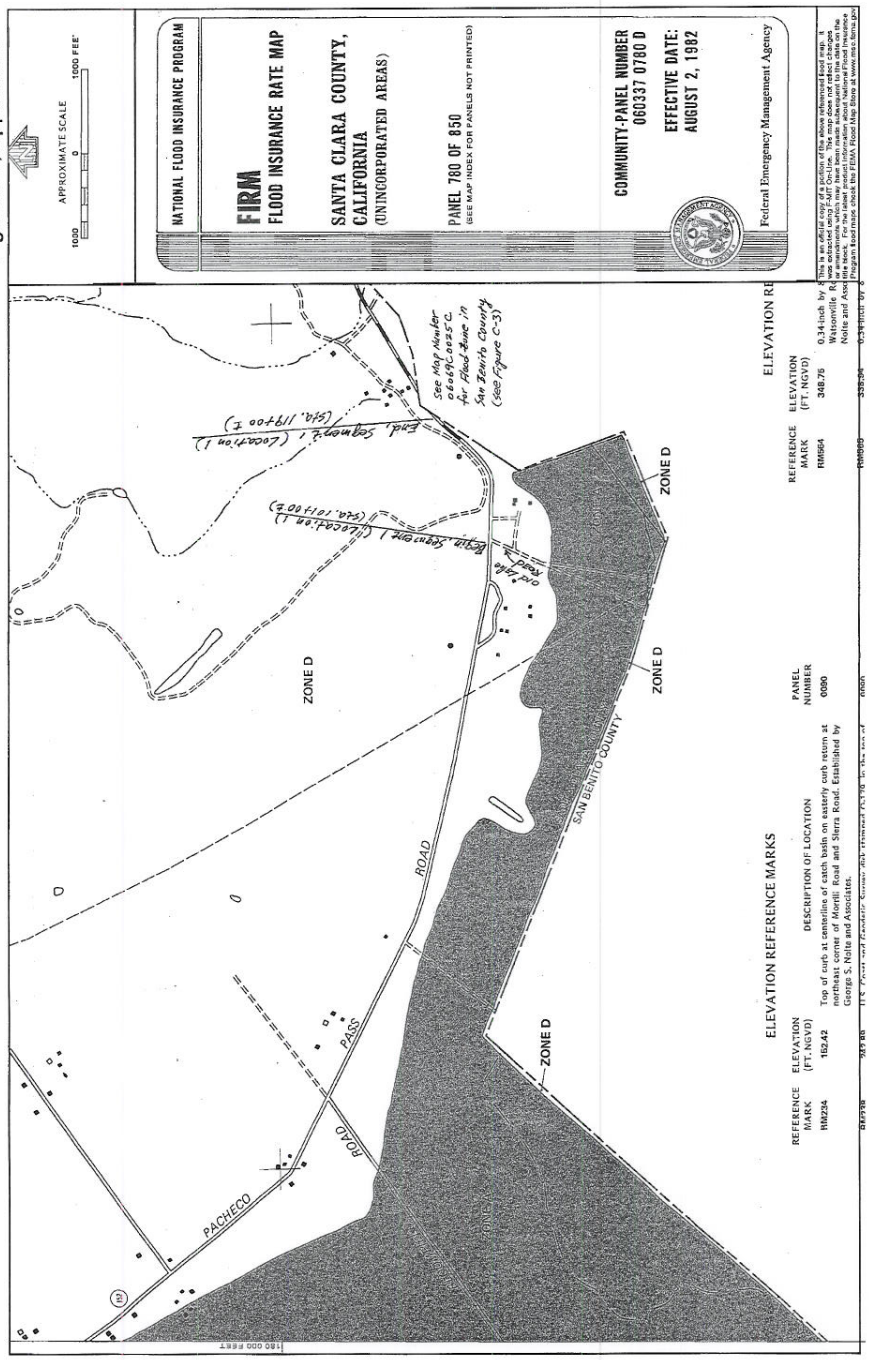


Figure C-2, Appendix C

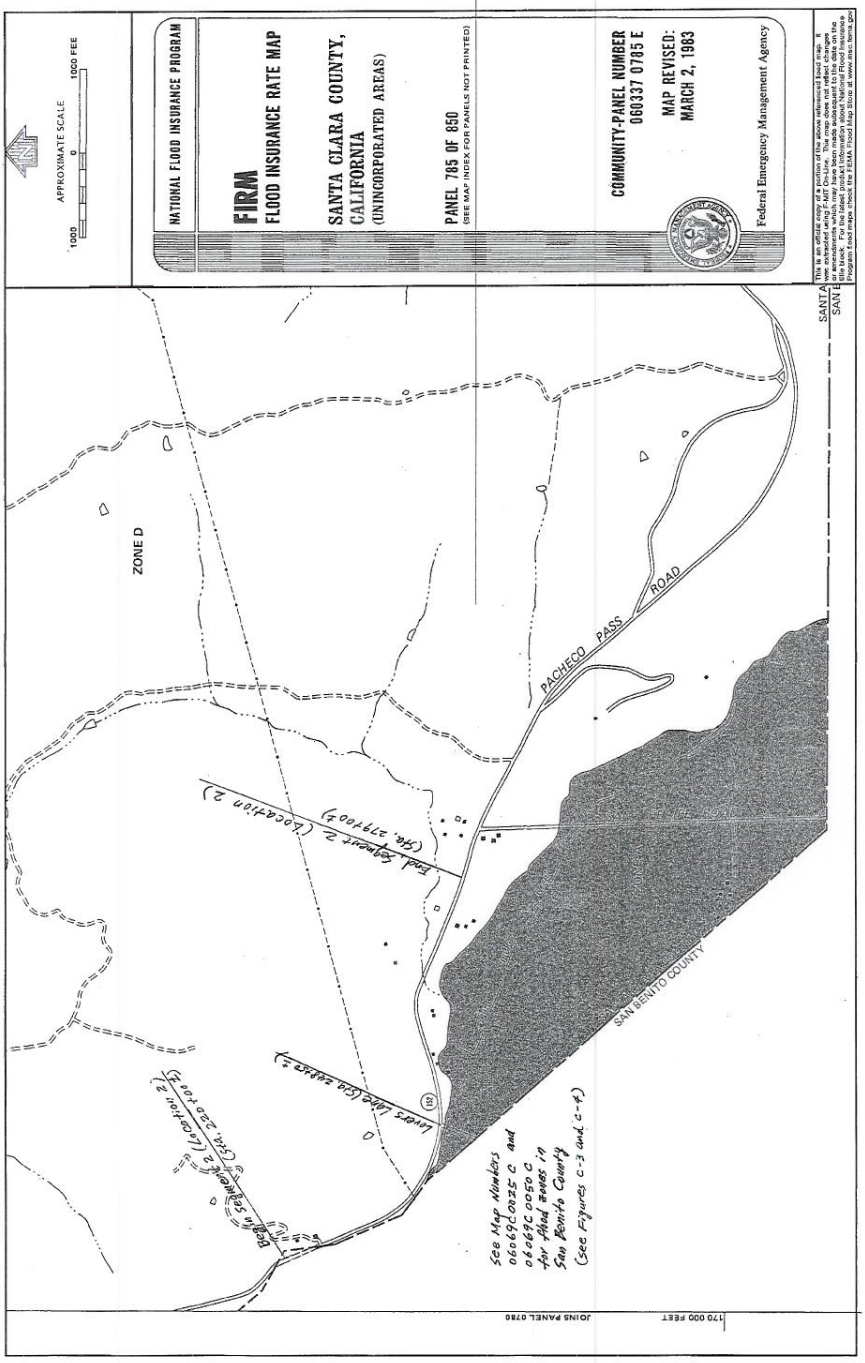


Figure C-3, Appendix C

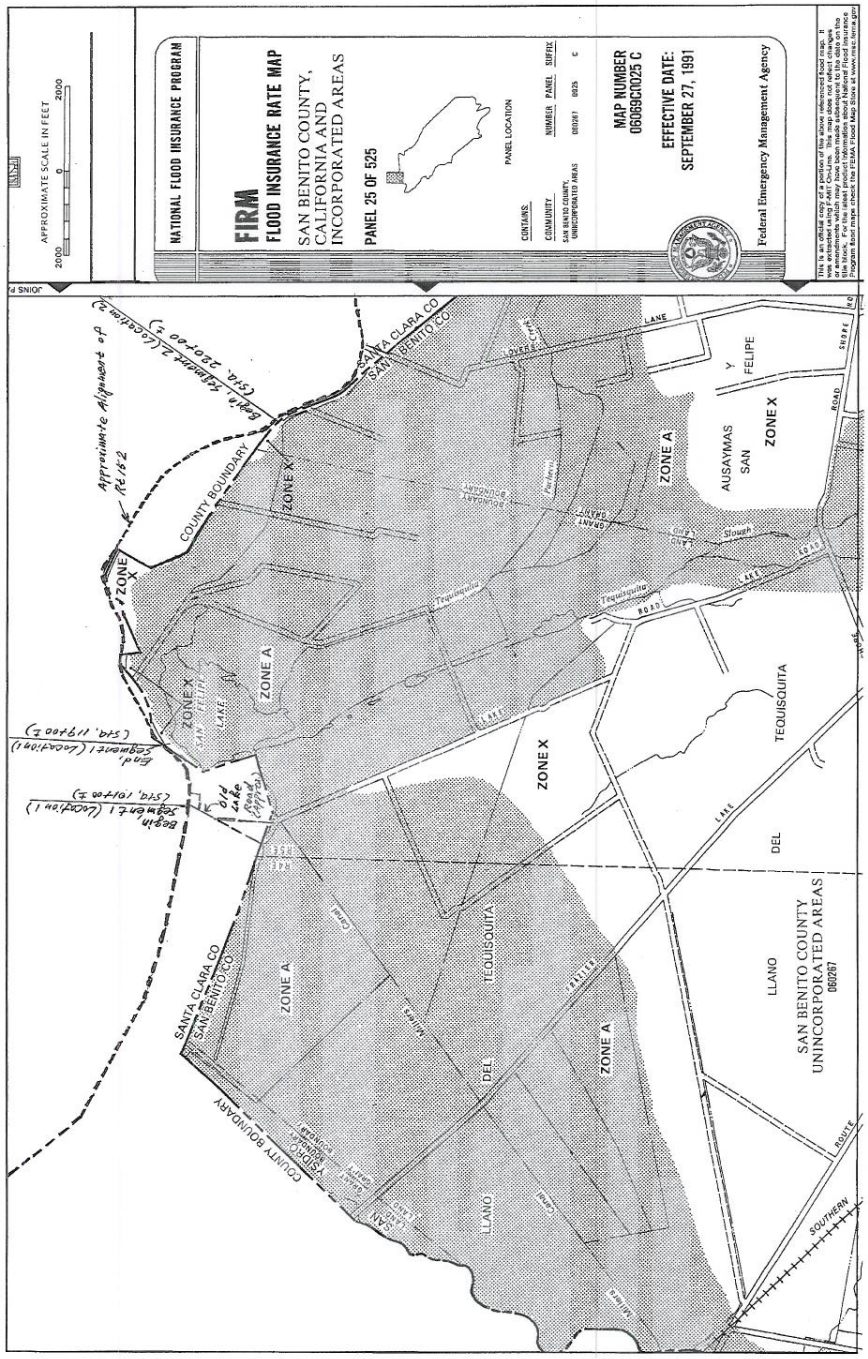


Figure C-4, Appendix C